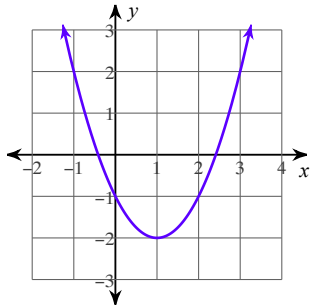
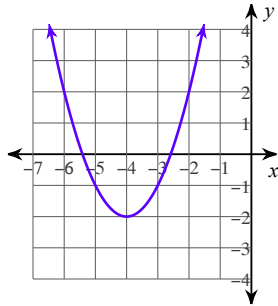


Answers to Quadratic Functions

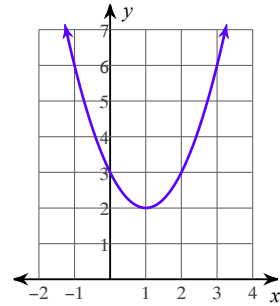
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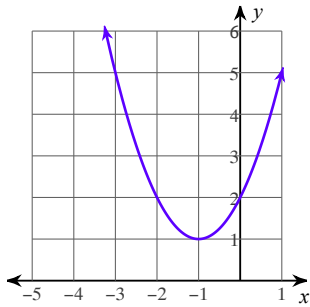
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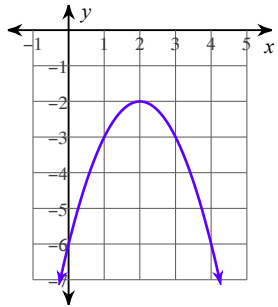
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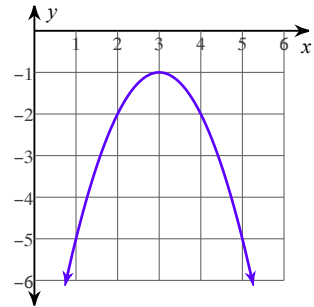
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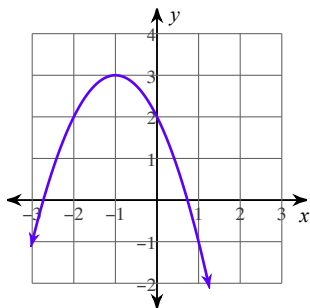
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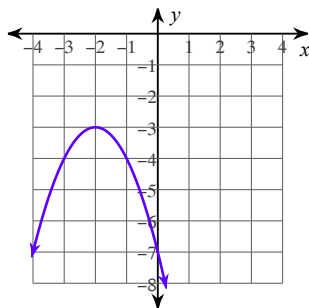
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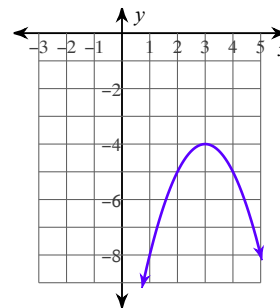
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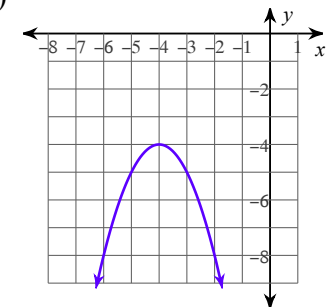
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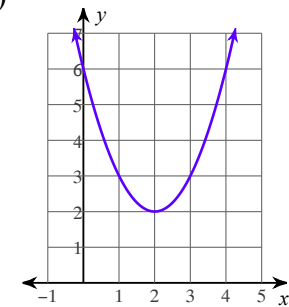
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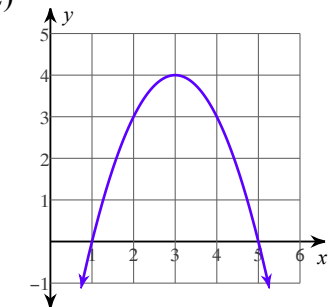
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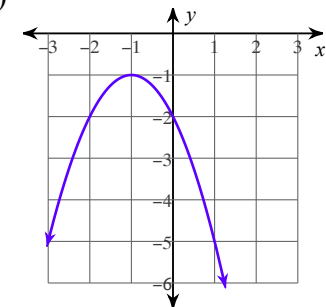
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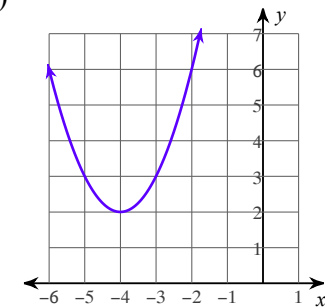
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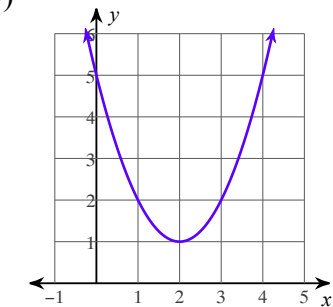
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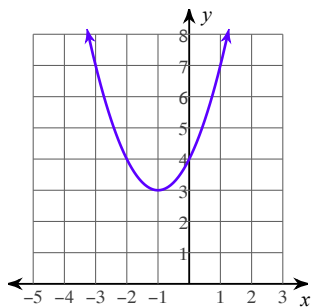
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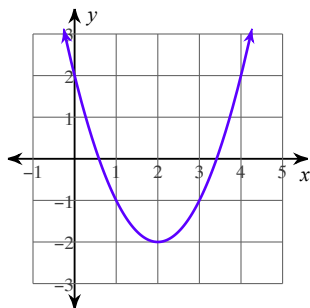
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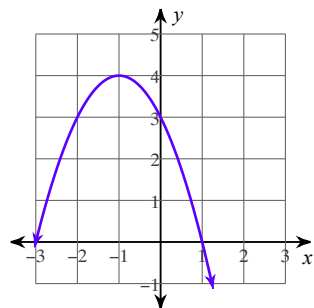
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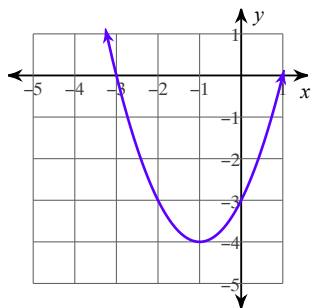
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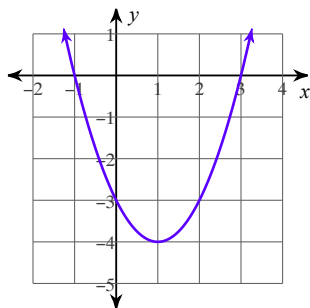
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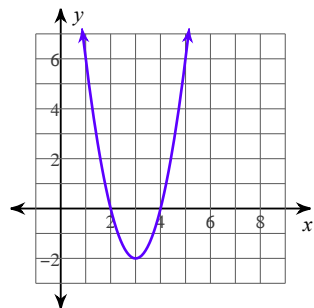
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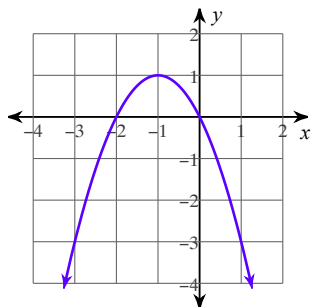
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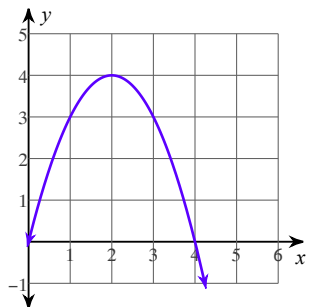
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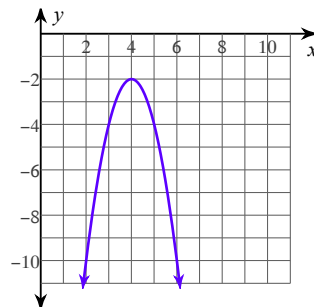
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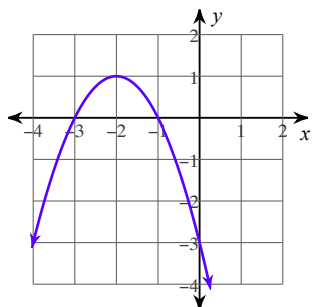
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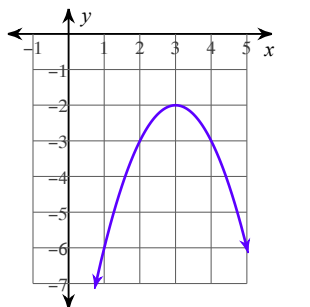
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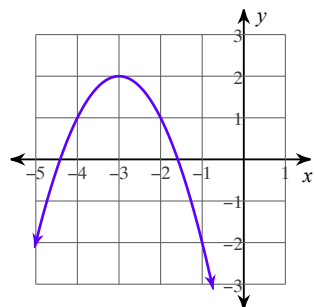
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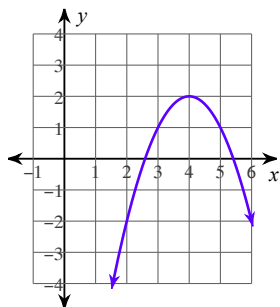
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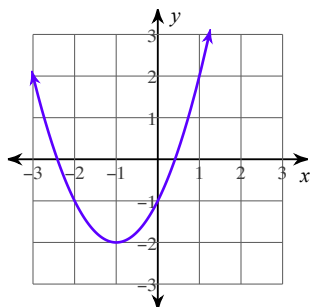
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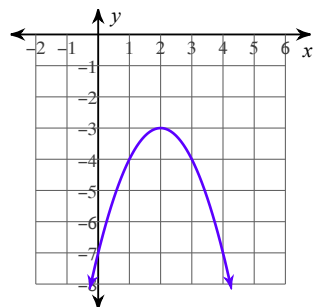
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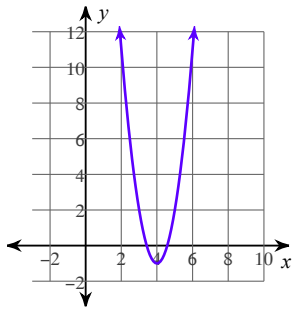
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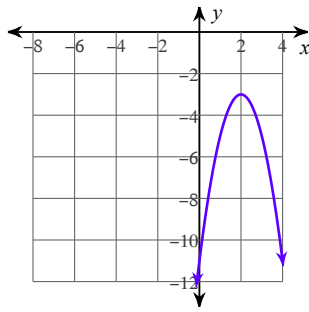
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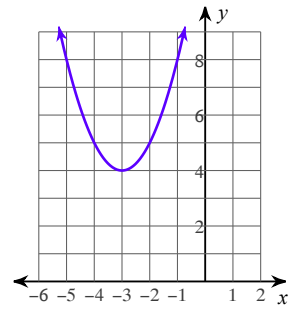
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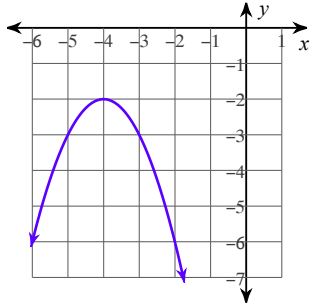
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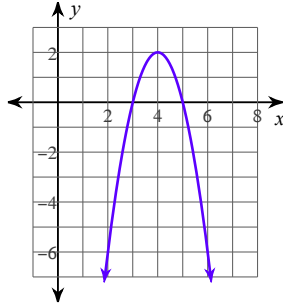
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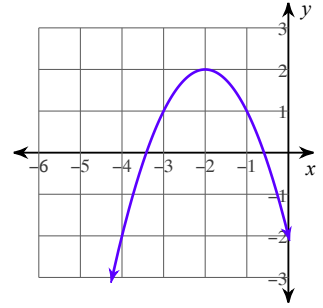
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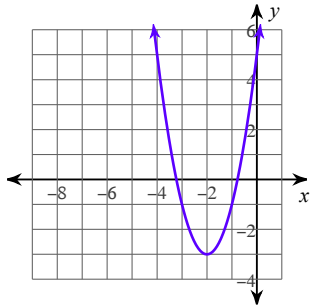
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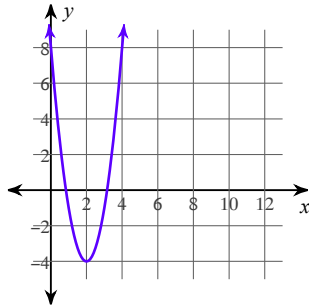
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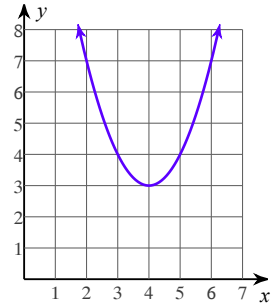
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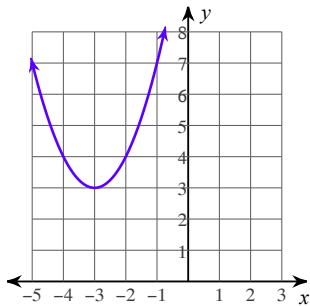
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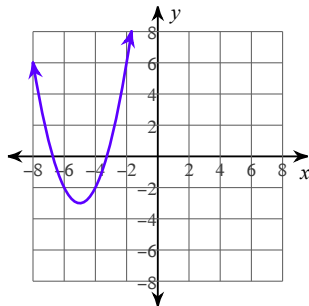
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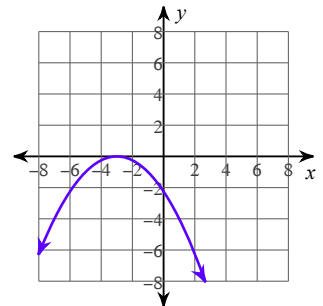
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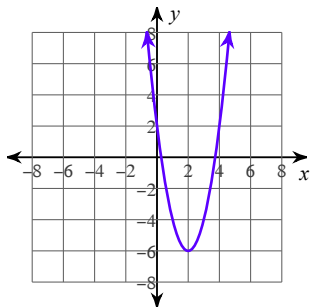
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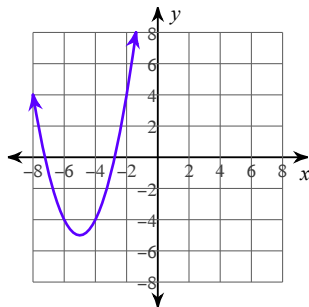
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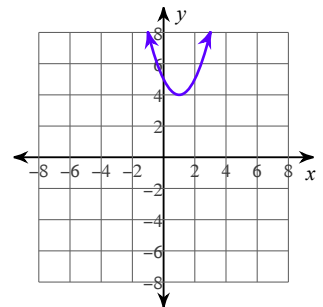
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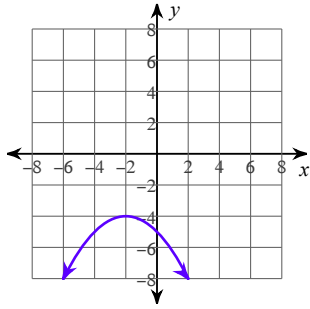
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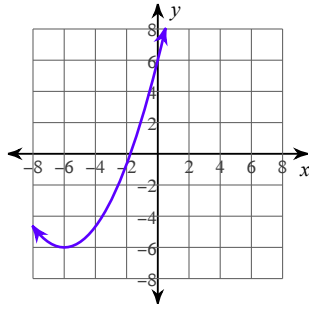
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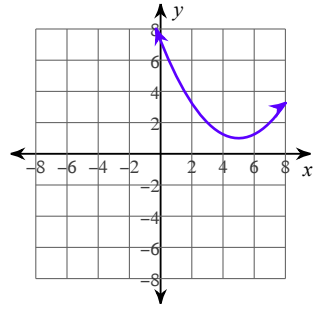
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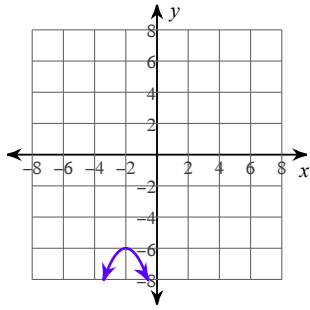
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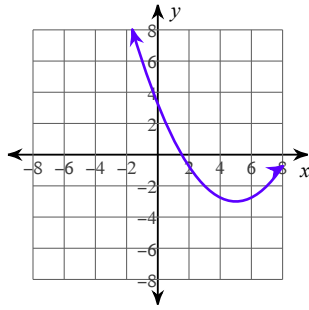
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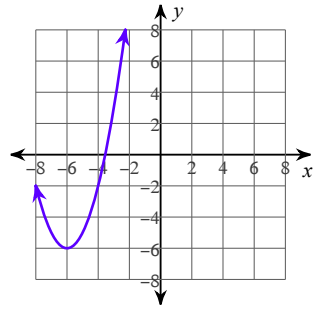
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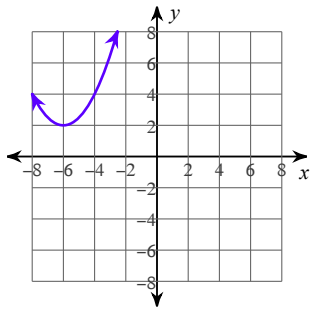
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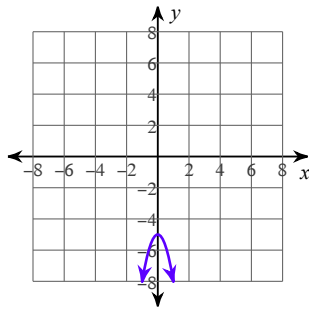
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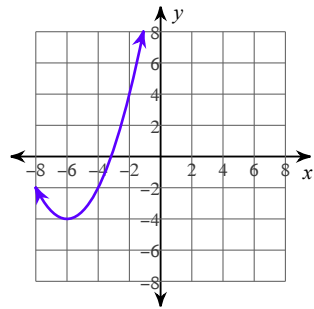
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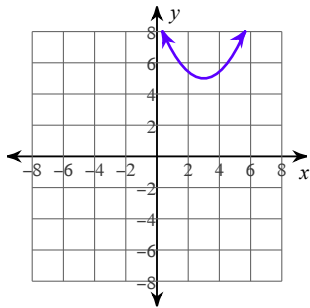
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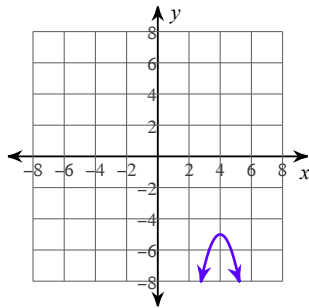
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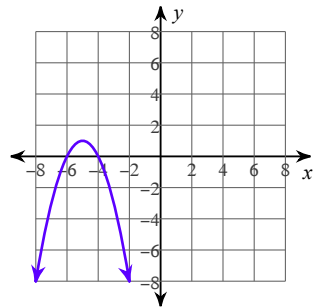
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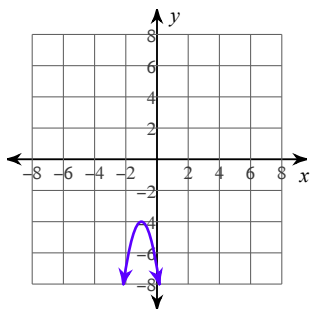
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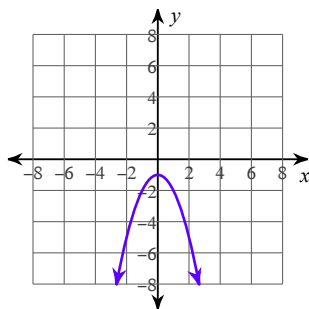
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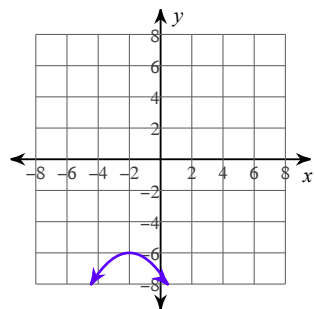
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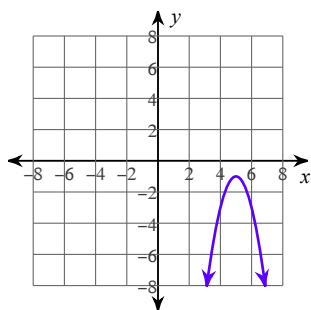
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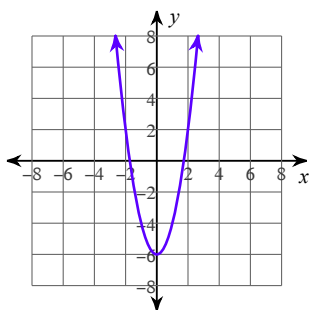
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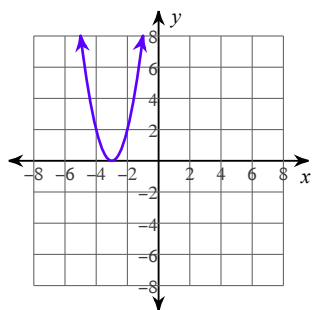
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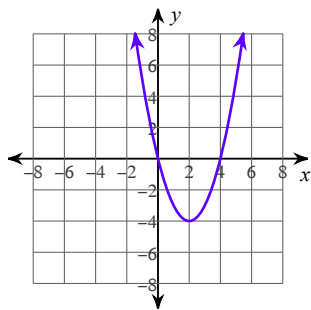
62)



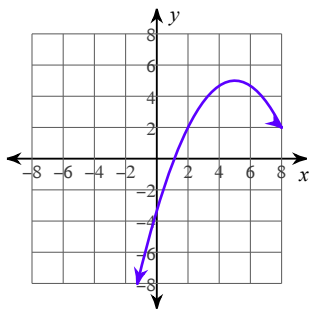
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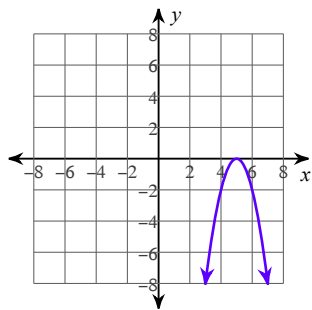
64)



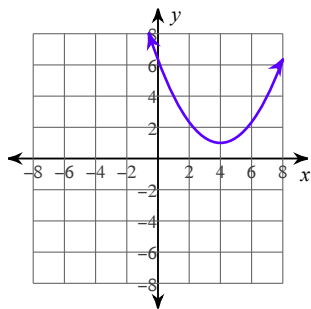
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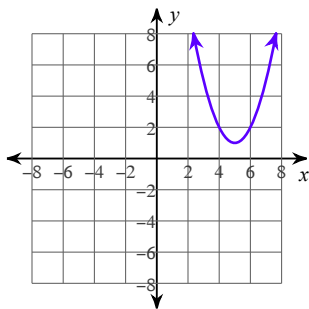
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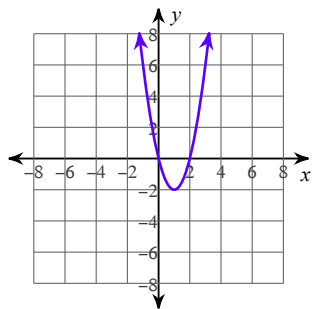
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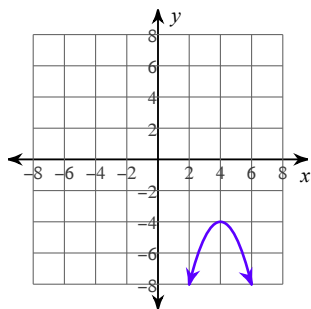
68)



69)



70)



71) $y = (x - 2)^2 - 6$

72) $y = \frac{1}{2}(x + 4)^2 + 6$

73) $y = \frac{1}{3}x^2 - 4$

74) $y = x^2 - 1$

75) $y = 2(x + 1)^2 - 6$

76) $y = \frac{1}{4}(x + 3)^2 + 1$

77) $y = \frac{1}{3}(x - 2)^2 + 2$

78) $y = (x + 5)^2 - 6$

79) $y = (x - 6)^2 + 1$

80) $y = x^2 - 6$

81) $y = -2(x + 6)^2$

82) $y = \frac{1}{2}(x + 6)^2 + 4$

83) $y = -(x - 6)^2 - 1$

84) $y = -(x + 6)^2 - 3$

85) $y = -(x + 2)^2 - 2$

86) $y = \frac{1}{3}(x - 4)^2 + 5$

87) $y = -(x - 6)^2 - 4$

88) $y = -3x^2 - 5$

89) $y = -(x - 6)^2 - 5$

90) $y = (x - 5)^2 + 3$

91) $y = -2(x + 1)^2 - 3$

92) $y = (x - 4)^2 - 4$

93) $y = -(x - 4)^2$

94) $y = 2(x - 4)^2 - 1$

95) $y = (x + 3)^2 - 4$

96) $y = (x - 1)^2 + 2$

97) $y = 2(x - 5)^2 - 2$

98) $y = (x - 5)^2 - 5$

99) $y = \frac{1}{2}(x - 4)^2 - 5$

100) $y = \frac{1}{4}(x - 2)^2$

101) $y = -\frac{2}{3}(x - 1)^2 + 2$

102) $y = -(x + 5)^2 - 5$

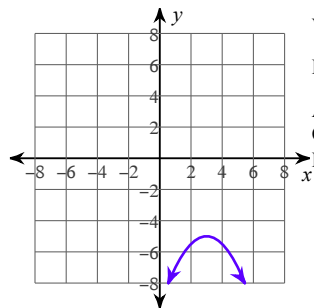
103) $y = (x - 5)^2 - 1$

104) $y = -(x - 4)^2 - 10$

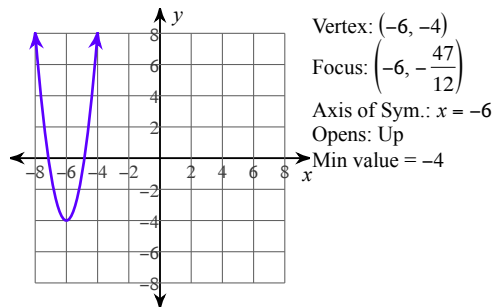
105) $y = 4x^2 + 5$

106) $y = -(x - 3)^2 + 5$

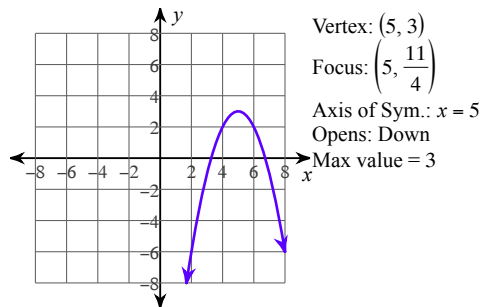
107) $y = 2(x + 9)^2 - 7$ 108) $y = 2(x + 8)^2 - 8$ 109) $y = 2(x - 8)^2 - 4$ 110) $y = 2(x - 2)^2$
 111) $y = -4(x + 4)^2 - 1$ 112) $y = -(x + 3)^2 - 2$ 113) $y = -4(x - 3)^2 + 6$
 114) $y = -(x + 2)^2 + 1$ 115) $y = -2(x + 5)^2 + 10$ 116) $y = -(x - 8)^2 - 5$
 117) $y = -3(x - 9)^2 - 3$ 118) $y = -(x + 8)^2 - 4$ 119) $y = -4(x + 9)^2 - 10$
 120) $y = -\frac{1}{2}(x + 6)^2 - 9$ 121)



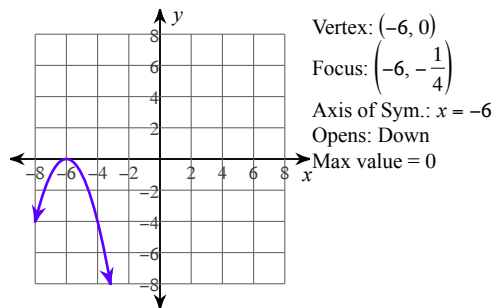
122)



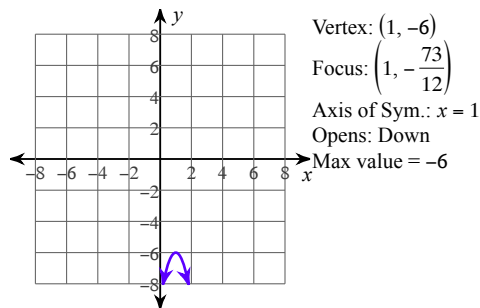
123)



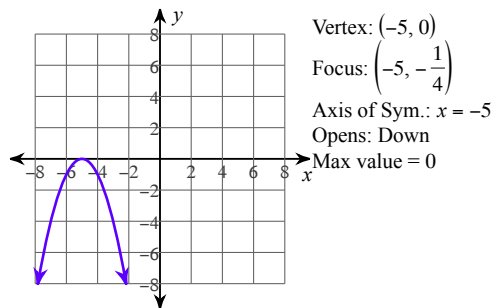
124)



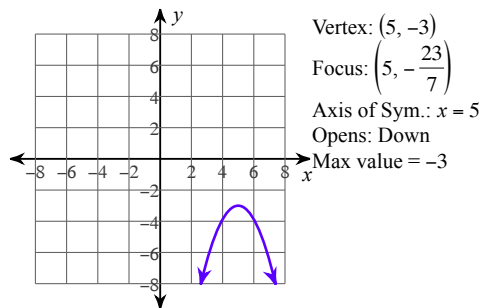
125)



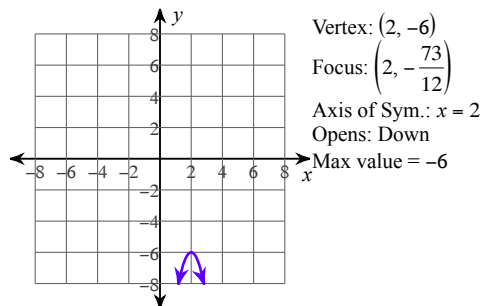
126)



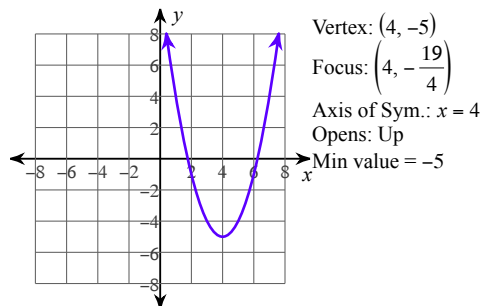
127)



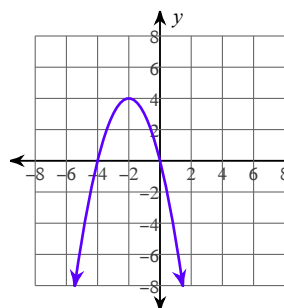
128)



129)

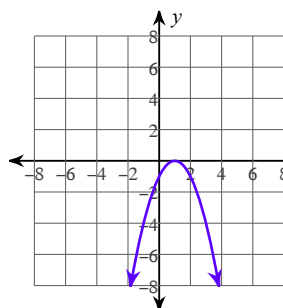


130)



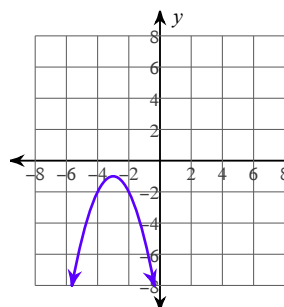
Vertex: $(-2, 4)$
 Focus: $(-2, \frac{15}{4})$
 Axis of Sym.: $x = -2$
 Opens: Down
 Max value = 4

131)



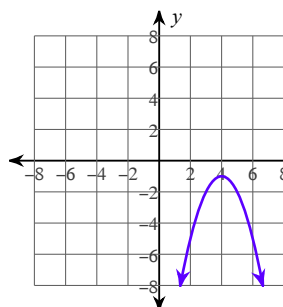
Vertex: $(1, 0)$
 Focus: $(1, -\frac{1}{4})$
 Axis of Sym.: $x = 1$
 Opens: Down
 Max value = 0

132)



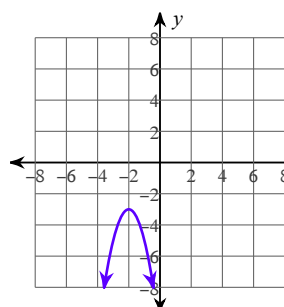
Vertex: $(-3, -1)$
 Focus: $(-3, -\frac{5}{4})$
 Axis of Sym.: $x = -3$
 Opens: Down
 Max value = -1

133)



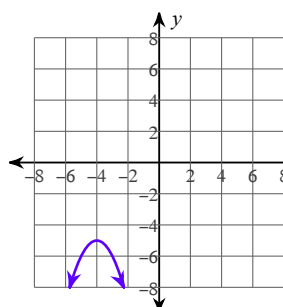
Vertex: $(4, -1)$
 Focus: $(4, -\frac{5}{4})$
 Axis of Sym.: $x = 4$
 Opens: Down
 Max value = -1

134)



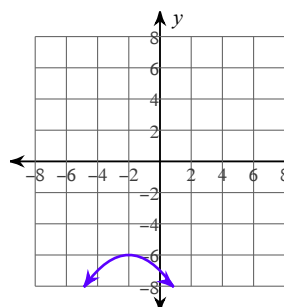
Vertex: $(-2, -3)$
 Focus: $(-2, -\frac{25}{8})$
 Axis of Sym.: $x = -2$
 Opens: Down
 Max value = -3

135)



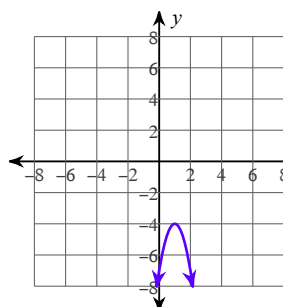
Vertex: $(-4, -5)$
 Focus: $(-4, -\frac{21}{4})$
 Axis of Sym.: $x = -4$
 Opens: Down
 Max value = -5

136)



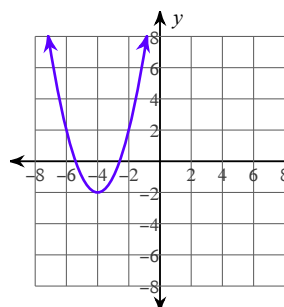
Vertex: $(-2, -6)$
 Focus: $(-2, -7)$
 Axis of Sym.: $x = -2$
 Opens: Down
 Max value = -6

137)



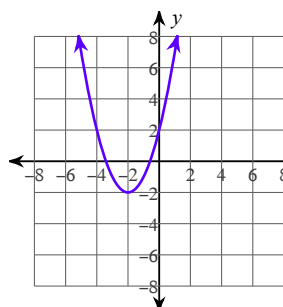
Vertex: $(1, -4)$
 Focus: $(1, -\frac{49}{12})$
 Axis of Sym.: $x = 1$
 Opens: Down
 Max value = -4

138)



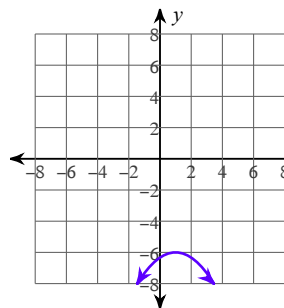
Vertex: $(-4, -2)$
 Focus: $(-4, -\frac{7}{4})$
 Axis of Sym.: $x = -4$
 Opens: Up
 Min value = -2

139)



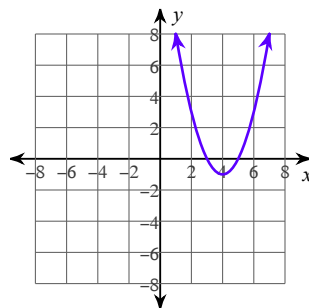
Vertex: $(-2, -2)$
 Focus: $(-2, -\frac{7}{4})$
 Axis of Sym.: $x = -2$
 Opens: Up
 Min value = -2

140)



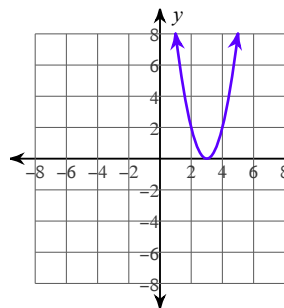
Vertex: $(1, -6)$
 Focus: $(1, -\frac{27}{4})$
 Axis of Sym.: $x = 1$
 Opens: Down
 Max value = -6

141)



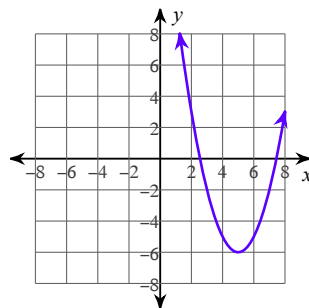
Vertex: $(4, -1)$
 Focus: $(4, -\frac{3}{4})$
 Axis of Sym.: $x = 4$
 Opens: Up
 Min value = -1

142)



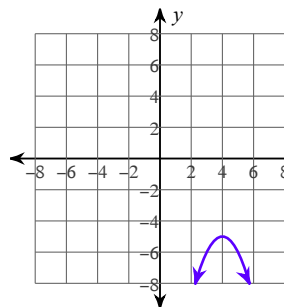
Vertex: $(3, 0)$
 Focus: $(3, \frac{1}{8})$
 Axis of Sym.: $x = 3$
 Opens: Up
 Min value = 0

143)



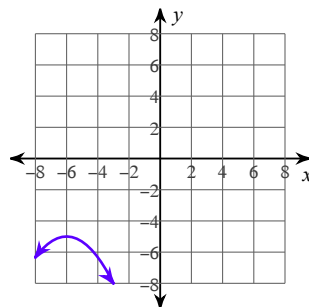
Vertex: $(5, -6)$
 Focus: $(5, -\frac{23}{4})$
 Axis of Sym.: $x = 5$
 Opens: Up
 Min value = -6

144)



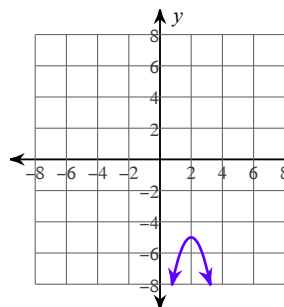
Vertex: $(4, -5)$
 Focus: $(4, -\frac{21}{4})$
 Axis of Sym.: $x = 4$
 Opens: Down
 Max value = -5

145)



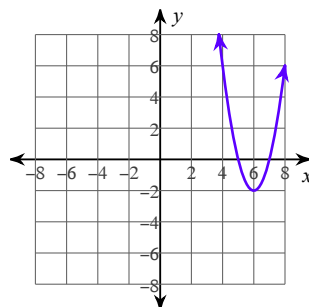
Vertex: $(-6, -5)$
 Focus: $(-6, -\frac{23}{4})$
 Axis of Sym.: $x = -6$
 Opens: Down
 Max value = -5

146)



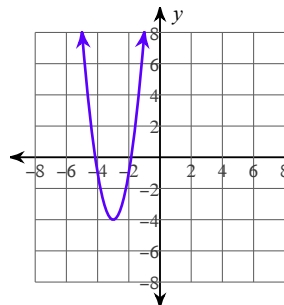
Vertex: $(2, -5)$
 Focus: $(2, -\frac{41}{8})$
 Axis of Sym.: $x = 2$
 Opens: Down
 Max value = -5

147)



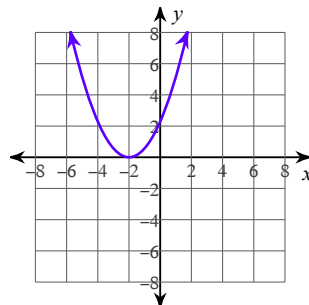
Vertex: $(6, -2)$
 Focus: $(6, -\frac{15}{8})$
 Axis of Sym.: $x = 6$
 Opens: Up
 Min value = -2

148)



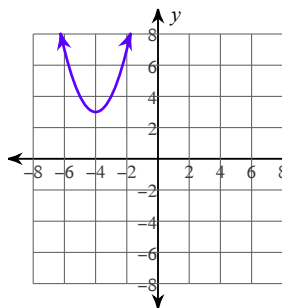
Vertex: $(-3, -4)$
 Focus: $(-3, -\frac{47}{12})$
 Axis of Sym.: $x = -3$
 Opens: Up
 Min value = -4

149)



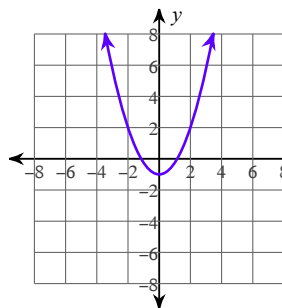
Vertex: $(-2, 0)$
 Focus: $(-2, \frac{7}{16})$
 Axis of Sym.: $x = -2$
 Opens: Up
 Min value = 0

150)



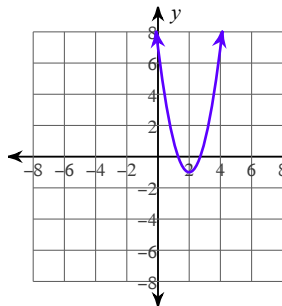
Vertex: $(-4, 3)$
 Focus: $(-4, \frac{13}{4})$
 Axis of Sym.: $x = -4$
 Opens: Up
 Min value = 3

151)



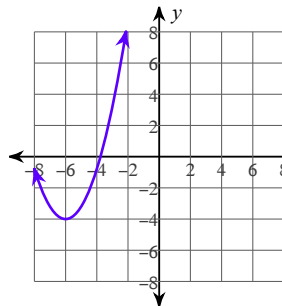
Vertex: $(0, -1)$
 Focus: $(0, -\frac{2}{3})$
 Axis of Sym.: $x = 0$
 Opens: Up
 Min value = -1

152)



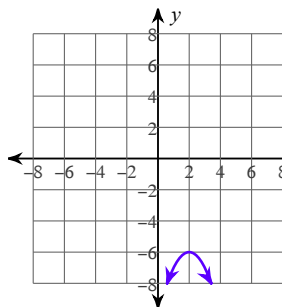
Vertex: $(2, -1)$
 Focus: $(2, -\frac{7}{8})$
 Axis of Sym.: $x = 2$
 Opens: Up
 Min value = -1

153)



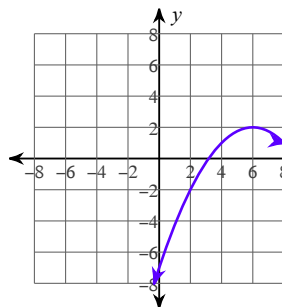
Vertex: $(-6, -4)$
 Focus: $(-6, -\frac{59}{16})$
 Axis of Sym.: $x = -6$
 Opens: Up
 Min value = -4

154)



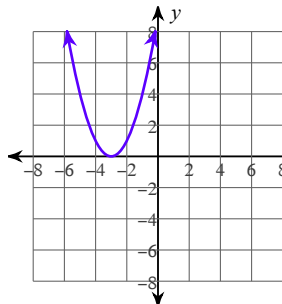
Vertex: $(2, -6)$
 Focus: $(2, -\frac{25}{4})$
 Axis of Sym.: $x = 2$
 Opens: Down
 Max value = -6

155)



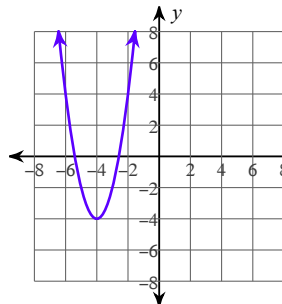
Vertex: $(6, 2)$
 Focus: $(6, 1)$
 Axis of Sym.: $x = 6$
 Opens: Down
 Max value = 2

156)



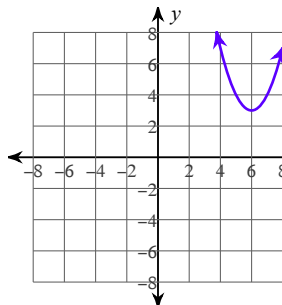
Vertex: $(-3, 0)$
 Focus: $(-3, \frac{1}{4})$
 Axis of Sym.: $x = -3$
 Opens: Up
 Min value = 0

157)



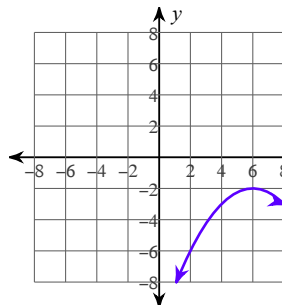
Vertex: $(-4, -4)$
 Focus: $(-4, -\frac{31}{8})$
 Axis of Sym.: $x = -4$
 Opens: Up
 Min value = -4

158)



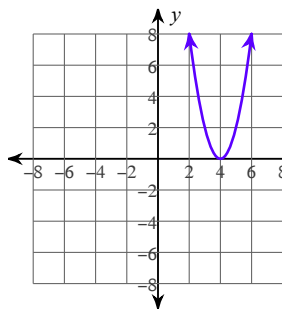
Vertex: $(6, 3)$
 Focus: $(6, \frac{13}{4})$
 Axis of Sym.: $x = 6$
 Opens: Up
 Min value = 3

159)



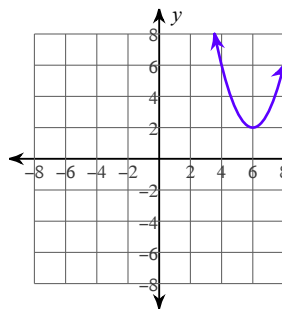
Vertex: $(6, -2)$
 Focus: $(6, -3)$
 Axis of Sym.: $x = 6$
 Opens: Down
 Max value = -2

160)



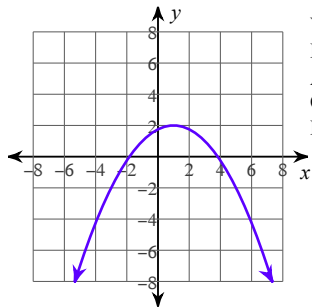
Vertex: $(4, 0)$
 Focus: $(4, \frac{1}{8})$
 Axis of Sym.: $x = 4$
 Opens: Up
 Min value = 0

161)



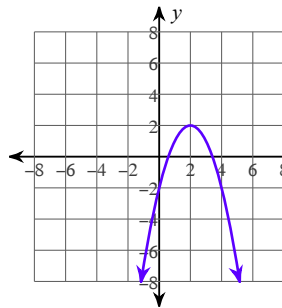
Vertex: $(6, 2)$
 Focus: $(6, \frac{9}{4})$
 Axis of Sym.: $x = 6$
 Opens: Up
 Min value = 2

162)



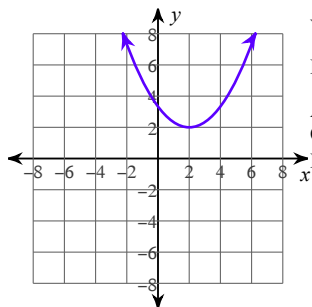
Vertex: $(1, 2)$
 Focus: $(1, 1)$
 Axis of Sym.: $x = 1$
 Opens: Down
 Max value = 2

163)



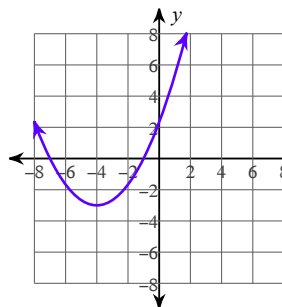
Vertex: $(2, 2)$
 Focus: $(2, \frac{7}{4})$
 Axis of Sym.: $x = 2$
 Opens: Down
 Max value = 2

164)



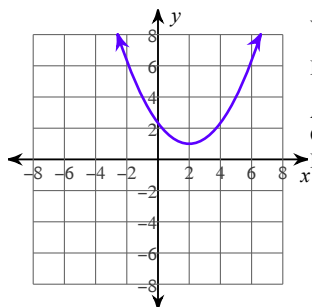
Vertex: $(2, 2)$
 Focus: $(2, \frac{11}{4})$
 Axis of Sym.: $x = 2$
 Opens: Up
 Min value = 2

165)



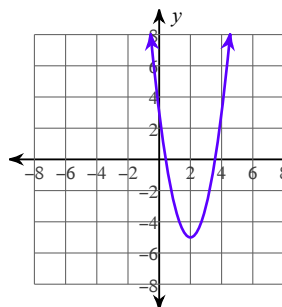
Vertex: $(-4, -3)$
 Focus: $(-4, -\frac{9}{4})$
 Axis of Sym.: $x = -4$
 Opens: Up
 Min value = -3

166)



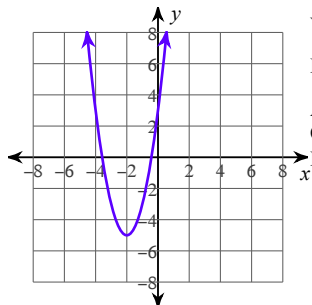
Vertex: $(2, 1)$
 Focus: $(2, \frac{7}{4})$
 Axis of Sym.: $x = 2$
 Opens: Up
 Min value = 1

167)



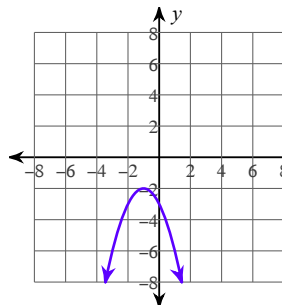
Vertex: $(2, -5)$
 Focus: $(2, -\frac{39}{8})$
 Axis of Sym.: $x = 2$
 Opens: Up
 Min value = -5

168)



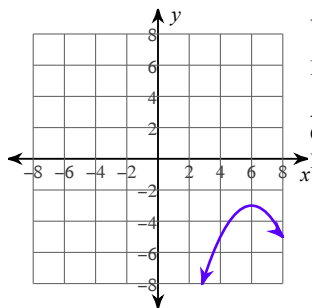
Vertex: $(-2, -5)$
 Focus: $(-2, -\frac{39}{8})$
 Axis of Sym.: $x = -2$
 Opens: Up
 Min value = -5

169)



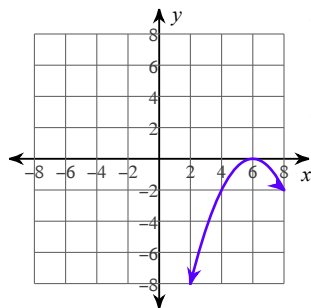
Vertex: $(-1, -2)$
 Focus: $(-1, -\frac{9}{4})$
 Axis of Sym.: $x = -1$
 Opens: Down
 Max value = -2

170)



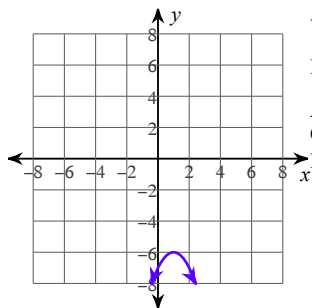
Vertex: $(6, -3)$
 Focus: $(6, -\frac{7}{2})$
 Axis of Sym.: $x = 6$
 Opens: Down
 Max value = -3

171)



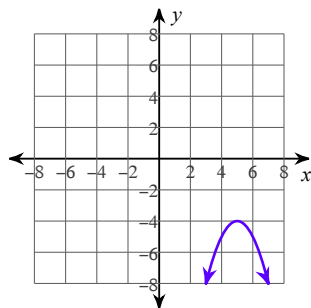
Vertex: $(6, 0)$
 Focus: $(6, -\frac{1}{2})$
 Axis of Sym.: $x = 6$
 Opens: Down
 Max value = 0

172)



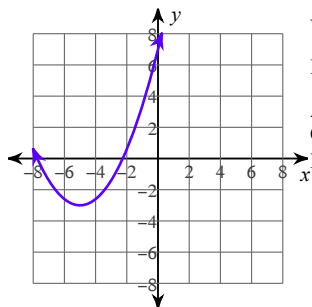
Vertex: $(1, -6)$
 Focus: $(1, -\frac{25}{4})$
 Axis of Sym.: $x = 1$
 Opens: Down
 Max value = -6

173)



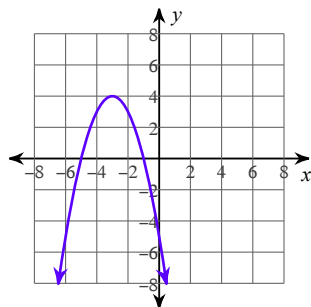
Vertex: $(5, -4)$
 Focus: $(5, -\frac{17}{4})$
 Axis of Sym.: $x = 5$
 Opens: Down
 Max value = -4

174)



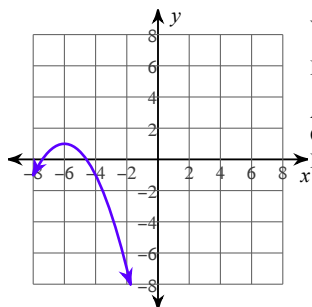
Vertex: $(-5, -3)$
 Focus: $(-5, -\frac{19}{8})$
 Axis of Sym.: $x = -5$
 Opens: Up
 Min value = -3

175)



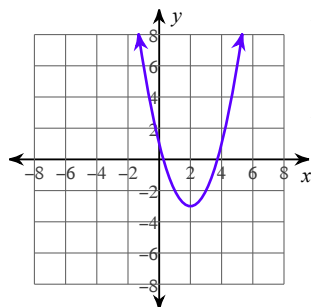
Vertex: $(-3, 4)$
 Focus: $(-3, \frac{15}{4})$
 Axis of Sym.: $x = -3$
 Opens: Down
 Max value = 4

176)



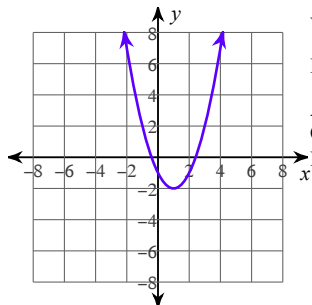
Vertex: $(-6, 1)$
 Focus: $(-6, \frac{1}{2})$
 Axis of Sym.: $x = -6$
 Opens: Down
 Max value = 1

177)



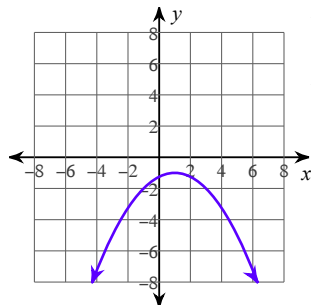
Vertex: $(2, -3)$
 Focus: $(2, -\frac{11}{4})$
 Axis of Sym.: $x = 2$
 Opens: Up
 Min value = -3

178)



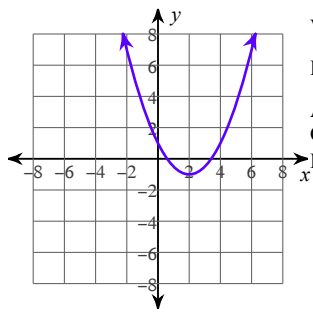
Vertex: $(1, -2)$
 Focus: $(1, -\frac{7}{4})$
 Axis of Sym.: $x = 1$
 Opens: Up
 Min value = -2

179)



Vertex: $(1, -1)$
 Focus: $(1, -2)$
 Axis of Sym.: $x = 1$
 Opens: Down
 Max value = -1

180)



Vertex: $(2, -1)$
 Focus: $(2, -\frac{1}{2})$
 Axis of Sym.: $x = 2$
 Opens: Up
 Min value = -1

181) Axis of Sym.: $x = \frac{3}{2}$

y-int: -12 x-int: 4 and -1

182) Axis of Sym.: $x = -\frac{11}{2}$

y-int: 24 x-int: -8 and -3

185) Axis of Sym.: $x = 2$

y-int: 6 x-int: 3 and 1

188) Axis of Sym.: $x = 0$

y-int: -76 x-int: 2 and -2

191) Axis of Sym.: $x = -6$

y-int: 385 x-int: -7 and -5

194) Axis of Sym.: $x = 3$

y-int: -28 x-int: 7 and -1

197) $9; (x + 3)^2$

201) $121; (r - 11)^2$

205) $4; (x - 2)^2$

209) $81; (x + 9)^2$

213) $324; (x - 18)^2$

217) $\frac{25}{4}; \left(y + \frac{5}{2}\right)^2$

221) $\frac{9}{4}; \left(x - \frac{3}{2}\right)^2$

225) $\frac{1849}{900}; \left(x - \frac{43}{30}\right)^2$

229) $\frac{1521}{484}; \left(x - \frac{39}{22}\right)^2$

232) $\frac{121}{4}; \left(n - \frac{11}{2}\right)^2$

236) $y = (x - 2)^2 + 8$

240) $y = (x + 8)^2 + 9$

244) $y = -(x - 1)^2 - 9$

247) $y = -(x + 3)^2 - 7$

183) Axis of Sym.: $x = \frac{3}{2}$

y-int: 0 x-int: 0 and 3

186) Axis of Sym.: $x = 2$

y-int: 5

x-int: None

189) Axis of Sym.: $x = -3$

y-int: $\frac{7}{4}$ x-int: 1 and -7

192) Axis of Sym.: $x = 2$

y-int: -315 x-int: 9 and -5

195) Axis of Sym.: $x = -8$

y-int: -129

x-int: None

198) $25; (x - 5)^2$

202) $144; (x - 12)^2$

206) $49; (x - 7)^2$

210) $16; (x + 4)^2$

214) $196; (p - 14)^2$

218) $\frac{289}{4}; \left(x - \frac{17}{2}\right)^2$

222) $\frac{81}{4}; \left(p - \frac{9}{2}\right)^2$

226) $\frac{1}{25}; \left(x + \frac{1}{5}\right)^2$

230) $\frac{44521}{1600}; \left(x + \frac{211}{40}\right)^2$

233) $\frac{81}{4}; \left(a + \frac{9}{2}\right)^2$

237) $y = (x - 10)^2 - 9$

241) $y = (x + 4)^2 + 7$

245) $y = -(x + 6)^2 + 8$

248) $y = 2(x + 6)^2 + 1$

199) $361; (x + 19)^2$

203) $100; (p - 10)^2$

207) $36; (x - 6)^2$

211) $1; (p + 1)^2$

215) $121; (z + 11)^2$

219) $\frac{49}{4}; \left(y - \frac{7}{2}\right)^2$

223) $\frac{169}{16}; \left(x + \frac{13}{4}\right)^2$

227) $\frac{121}{4}; \left(r + \frac{11}{2}\right)^2$

231) $\frac{25}{4}; \left(x - \frac{5}{2}\right)^2$

234) $\frac{25}{324}; \left(n - \frac{5}{18}\right)^2$

238) $y = (x - 9)^2 - 7$

242) $y = (x - 3)^2 + 7$

246) $y = -(x - 10)^2 - 8$

249) $y = \frac{1}{3}(x - 4)^2 - 9$

184) Axis of Sym.: $x = \frac{7}{2}$

y-int: -120 x-int: 10 and -3

187) Axis of Sym.: $x = 7$

y-int: -295

x-int: None

190) Axis of Sym.: $x = \frac{5}{2}$

y-int: -24 x-int: 8 and -3

193) Axis of Sym.: $x = -4$

y-int: -60 x-int: -5 and -3

196) $64; (n + 8)^2$

200) $169; (r - 13)^2$

204) $49; (x + 7)^2$

208) $400; (m - 20)^2$

212) $324; (x + 18)^2$

216) $\frac{256}{169}; \left(x - \frac{16}{13}\right)^2$

220) $\frac{361}{4}; \left(x + \frac{19}{2}\right)^2$

224) $\frac{441}{4}; \left(x + \frac{21}{2}\right)^2$

228) $\frac{1}{4}; \left(y - \frac{1}{2}\right)^2$

235) $\frac{9}{361}; \left(x - \frac{3}{19}\right)^2$

239) $y = (x + 5)^2 + 6$

243) $y = (x + 1)^2 + 9$

250) $y = 4(x - 3)^2 + 1$

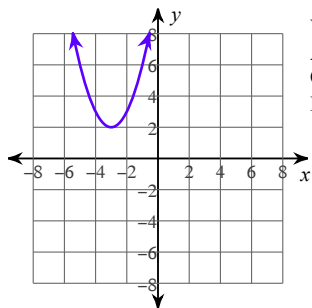
$$251) y = -\frac{1}{2}(x+5)^2 + 6$$

$$252) y = -3(x-2)^2 + 10$$

$$253) y = -\frac{1}{3}(x-1)^2 + 8$$

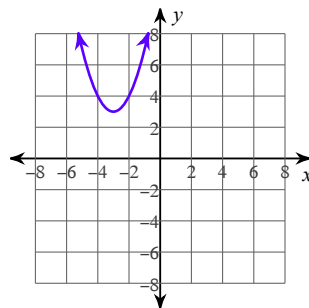
$$254) y = \frac{2}{7}(x-6)^2 - 8 \quad 255) y = -\frac{2}{3}(x+5)^2 + 2$$

256)



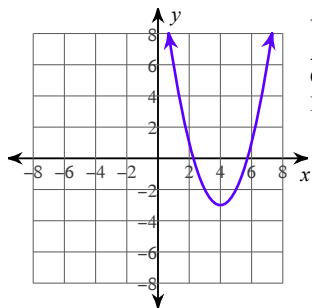
Vertex: $(-3, 2)$
Axis of Sym.: $x = -3$
Opens: Up
Min value = 2

257)



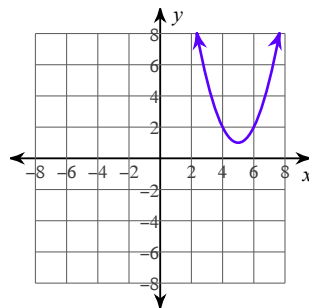
Vertex: $(-3, 3)$
Axis of Sym.: $x = -3$
Opens: Up
Min value = 3

258)



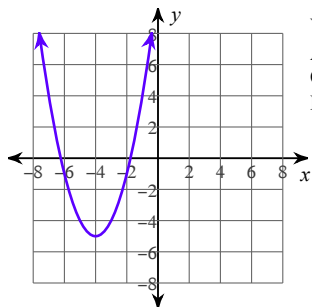
Vertex: $(4, -3)$
Axis of Sym.: $x = 4$
Opens: Up
Min value = -3

259)



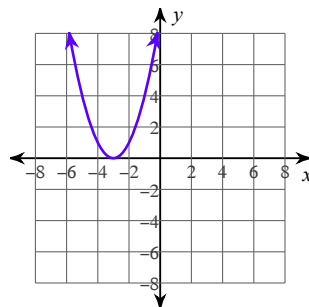
Vertex: $(5, 1)$
Axis of Sym.: $x = 5$
Opens: Up
Min value = 1

260)



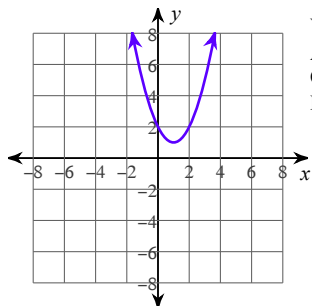
Vertex: $(-4, -5)$
Axis of Sym.: $x = -4$
Opens: Up
Min value = -5

261)



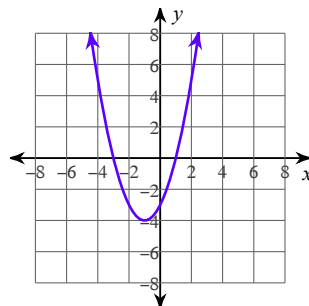
Vertex: $(-3, 0)$
Axis of Sym.: $x = -3$
Opens: Up
Min value = 0

262)



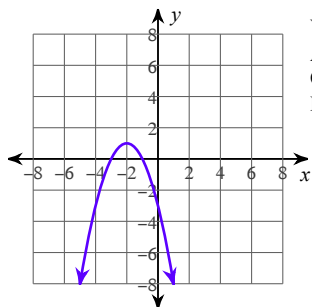
Vertex: $(1, 1)$
Axis of Sym.: $x = 1$
Opens: Up
Min value = 1

263)



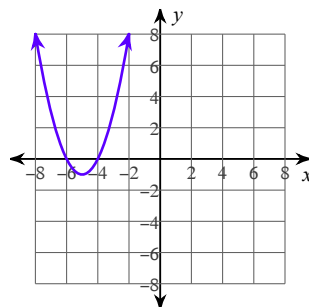
Vertex: $(-1, -4)$
Axis of Sym.: $x = -1$
Opens: Up
Min value = -4

264)



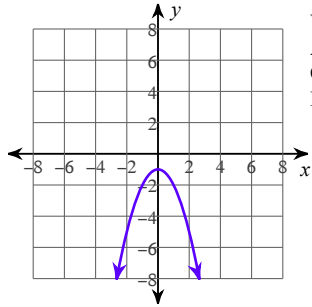
Vertex: $(-2, 1)$
Axis of Sym.: $x = -2$
Opens: Down
Max value = 1

265)



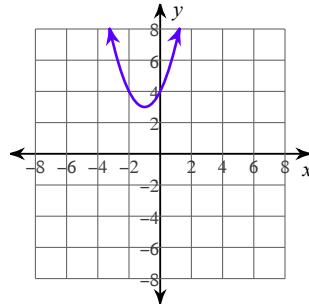
Vertex: $(-5, -1)$
Axis of Sym.: $x = -5$
Opens: Up
Min value = -1

266)



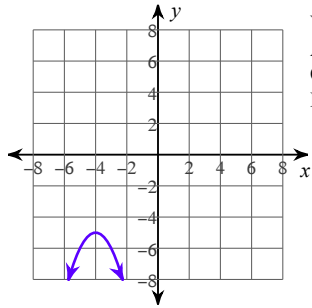
Vertex: $(0, -1)$
 Axis of Sym.: $x = 0$
 Opens: Down
 Max value = -1

267)



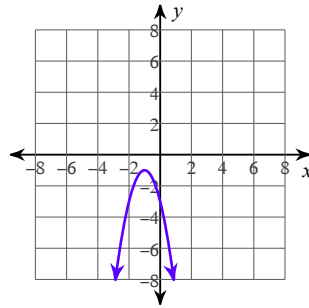
Vertex: $(-1, 3)$
 Axis of Sym.: $x = -1$
 Opens: Up
 Min value = 3

268)



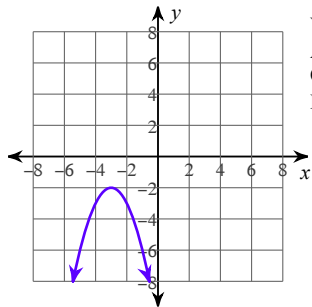
Vertex: $(-4, -5)$
 Axis of Sym.: $x = -4$
 Opens: Down
 Max value = -5

269)



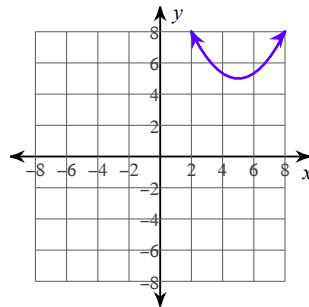
Vertex: $(-1, -1)$
 Axis of Sym.: $x = -1$
 Opens: Down
 Max value = -1

270)



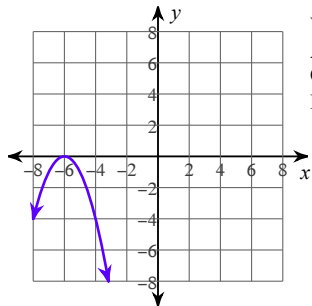
Vertex: $(-3, -2)$
 Axis of Sym.: $x = -3$
 Opens: Down
 Max value = -2

271)



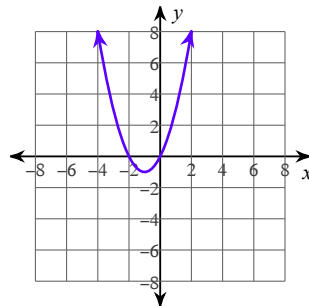
Vertex: $(5, 5)$
 Axis of Sym.: $x = 5$
 Opens: Up
 Min value = 5

272)



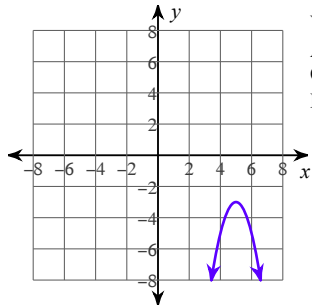
Vertex: $(-6, 0)$
 Axis of Sym.: $x = -6$
 Opens: Down
 Max value = 0

273)



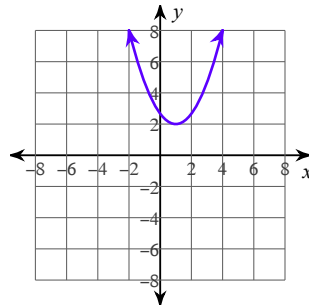
Vertex: $(-1, -1)$
 Axis of Sym.: $x = -1$
 Opens: Up
 Min value = -1

274)



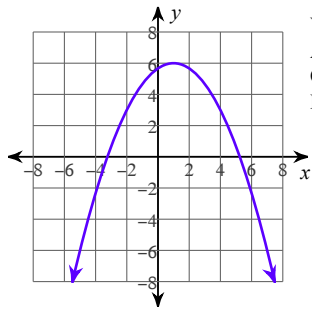
Vertex: $(5, -3)$
 Axis of Sym.: $x = 5$
 Opens: Down
 Max value = -3

275)



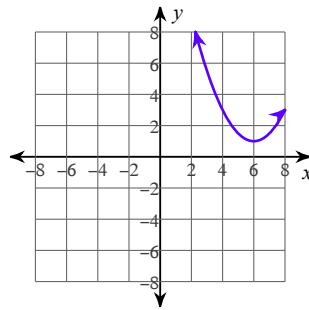
Vertex: $(1, 2)$
 Axis of Sym.: $x = 1$
 Opens: Up
 Min value = 2

276)



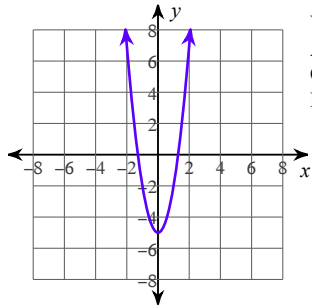
Vertex: $(1, 6)$
 Axis of Sym.: $x = 1$
 Opens: Down
 Max value = 6

277)



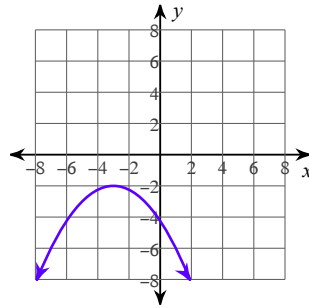
Vertex: $(6, 1)$
 Axis of Sym.: $x = 6$
 Opens: Up
 Min value = 1

278)



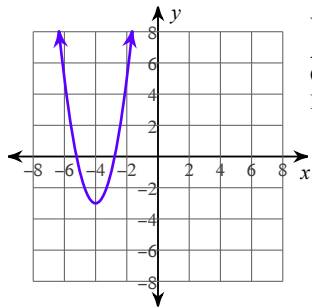
Vertex: $(0, -5)$
 Axis of Sym.: $x = 0$
 Opens: Up
 Min value = -5

279)



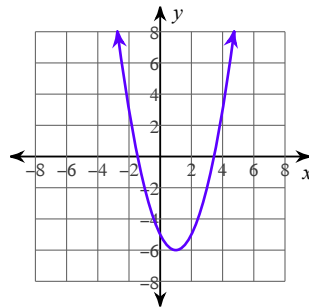
Vertex: $(-3, -2)$
 Axis of Sym.: $x = -3$
 Opens: Down
 Max value = -2

280)



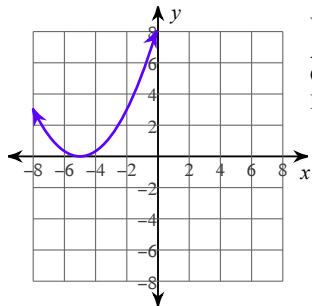
Vertex: $(-4, -3)$
 Axis of Sym.: $x = -4$
 Opens: Up
 Min value = -3

281)



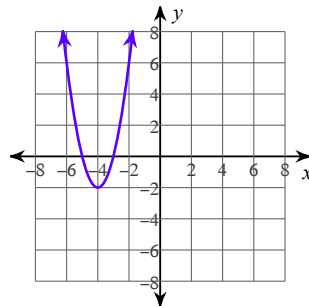
Vertex: $(1, -6)$
 Axis of Sym.: $x = 1$
 Opens: Up
 Min value = -6

282)



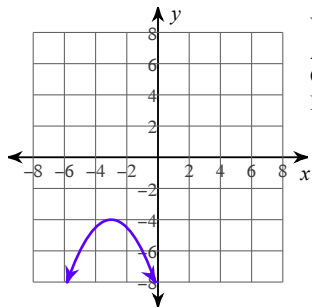
Vertex: $(-5, 0)$
 Axis of Sym.: $x = -5$
 Opens: Up
 Min value = 0

283)



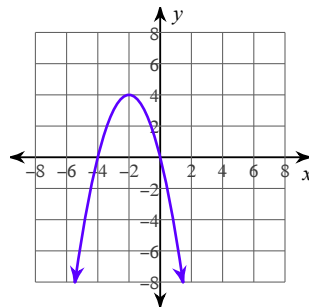
Vertex: $(-4, -2)$
 Axis of Sym.: $x = -4$
 Opens: Up
 Min value = -2

284)



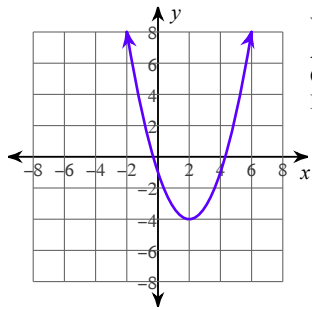
Vertex: $(-3, -4)$
 Axis of Sym.: $x = -3$
 Opens: Down
 Max value = -4

285)



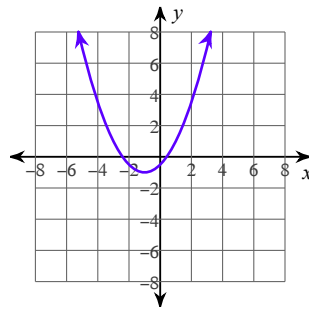
Vertex: $(-2, 4)$
 Axis of Sym.: $x = -2$
 Opens: Down
 Max value = 4

286)



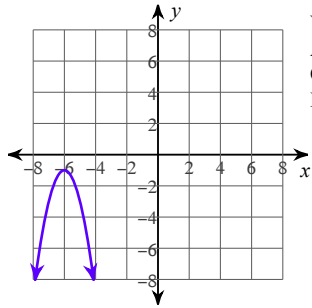
Vertex: $(2, -4)$
 Axis of Sym.: $x = 2$
 Opens: Up
 Min value = -4

287)



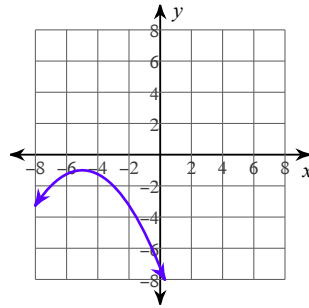
Vertex: $(-1, -1)$
 Axis of Sym.: $x = -1$
 Opens: Up
 Min value = -1

288)



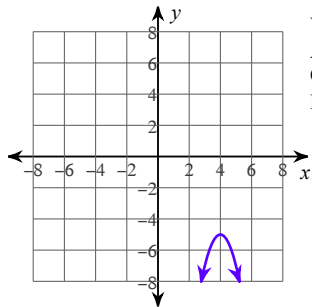
Vertex: $(-6, -1)$
 Axis of Sym.: $x = -6$
 Opens: Down
 Max value = -1

289)



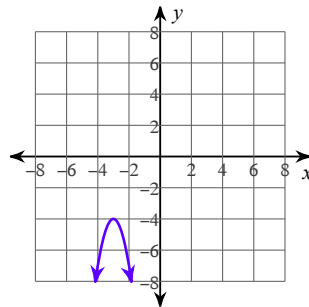
Vertex: $(-5, -1)$
 Axis of Sym.: $x = -5$
 Opens: Down
 Max value = -1

290)



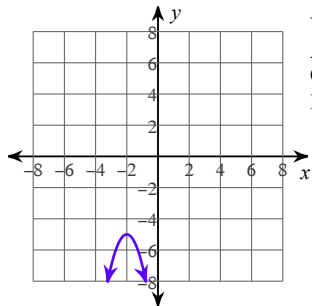
Vertex: $(4, -5)$
 Axis of Sym.: $x = 4$
 Opens: Down
 Max value = -5

291)



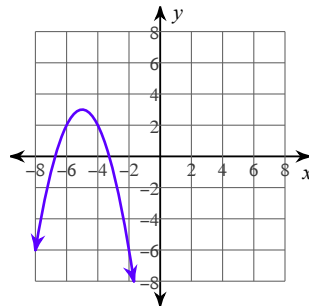
Vertex: $(-3, -4)$
 Axis of Sym.: $x = -3$
 Opens: Down
 Max value = -4

292)



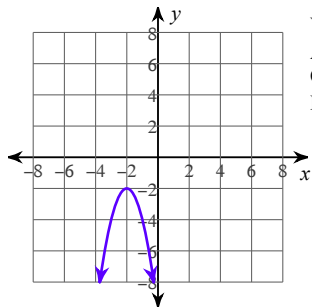
Vertex: $(-2, -5)$
 Axis of Sym.: $x = -2$
 Opens: Down
 Max value = -5

293)



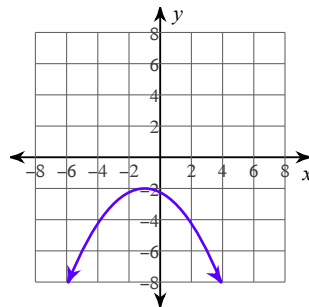
Vertex: $(-5, 3)$
 Axis of Sym.: $x = -5$
 Opens: Down
 Max value = 3

294)



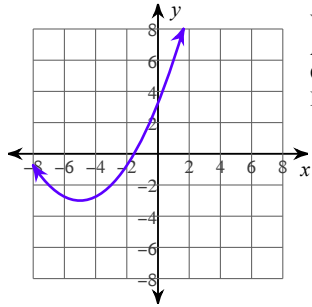
Vertex: $(-2, -2)$
 Axis of Sym.: $x = -2$
 Opens: Down
 Max value = -2

295)



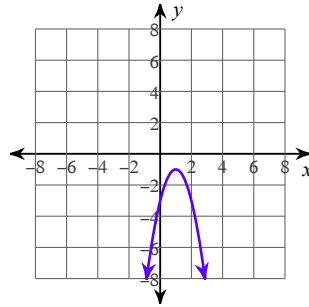
Vertex: $(-1, -2)$
 Axis of Sym.: $x = -1$
 Opens: Down
 Max value = -2

296)



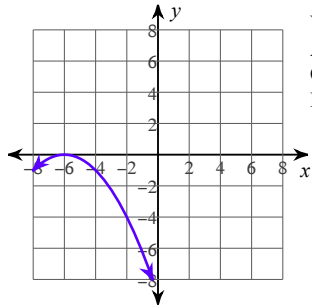
Vertex: $(-5, -3)$
 Axis of Sym.: $x = -5$
 Opens: Up
 Min value = -3

297)



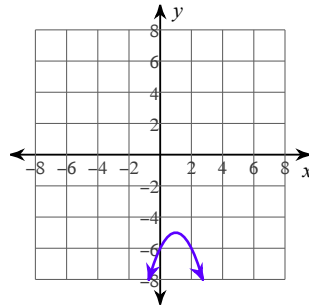
Vertex: $(1, -1)$
 Axis of Sym.: $x = 1$
 Opens: Down
 Max value = -1

298)



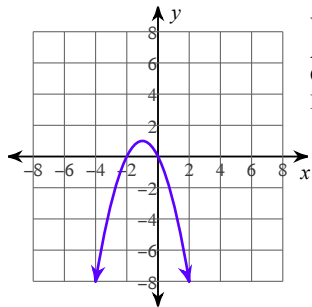
Vertex: $(-6, 0)$
 Axis of Sym.: $x = -6$
 Opens: Down
 Max value = 0

299)



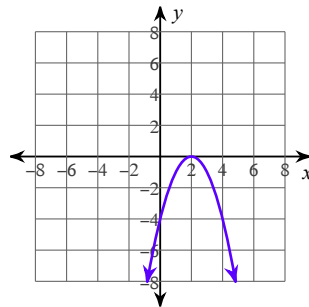
Vertex: $(1, -5)$
 Axis of Sym.: $x = 1$
 Opens: Down
 Max value = -5

300)



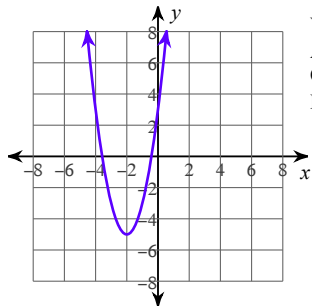
Vertex: $(-1, 1)$
 Axis of Sym.: $x = -1$
 Opens: Down
 Max value = 1

301)



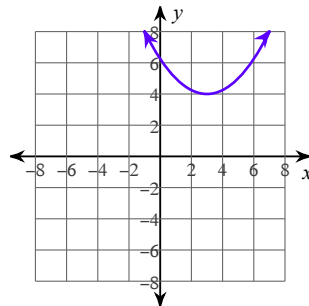
Vertex: $(2, 0)$
 Axis of Sym.: $x = 2$
 Opens: Down
 Max value = 0

302)



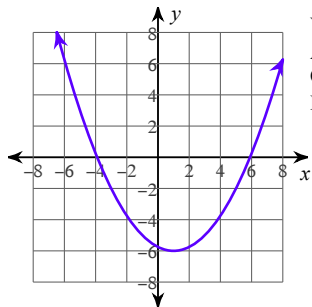
Vertex: $(-2, -5)$
 Axis of Sym.: $x = -2$
 Opens: Up
 Min value = -5

303)



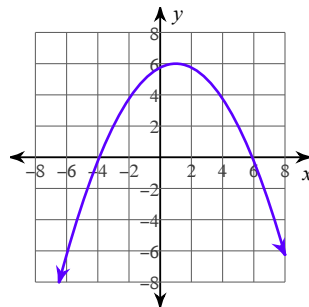
Vertex: $(3, 4)$
 Axis of Sym.: $x = 3$
 Opens: Up
 Min value = 4

304)



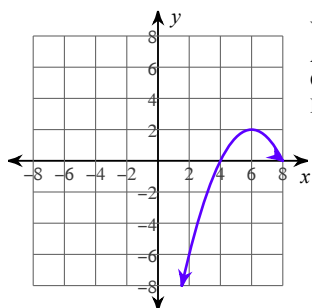
Vertex: $(1, -6)$
 Axis of Sym.: $x = 1$
 Opens: Up
 Min value = -6

305)



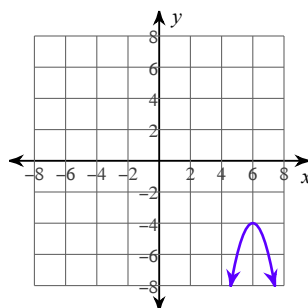
Vertex: $(1, 6)$
 Axis of Sym.: $x = 1$
 Opens: Down
 Max value = 6

306)



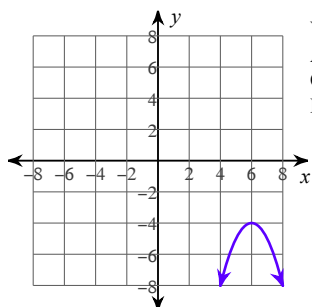
Vertex: $(6, 2)$
 Axis of Sym.: $x = 6$
 Opens: Down
 Max value = 2

307)



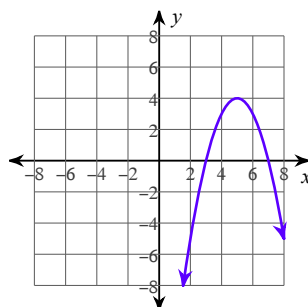
Vertex: $(6, -4)$
 Axis of Sym.: $x = 6$
 Opens: Down
 Max value = -4

308)



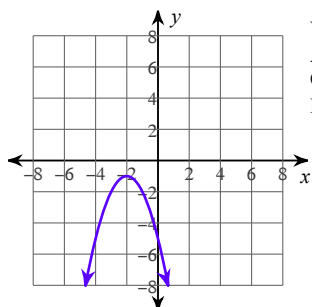
Vertex: $(6, -4)$
 Axis of Sym.: $x = 6$
 Opens: Down
 Max value = -4

309)



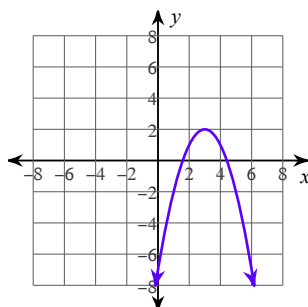
Vertex: $(5, 4)$
 Axis of Sym.: $x = 5$
 Opens: Down
 Max value = 4

310)



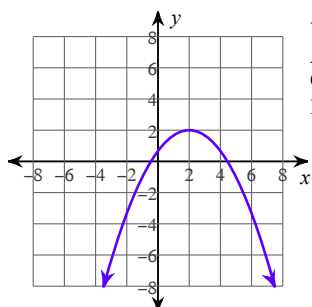
Vertex: $(-2, -1)$
 Axis of Sym.: $x = -2$
 Opens: Down
 Max value = -1

311)



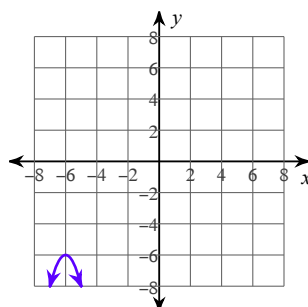
Vertex: $(3, 2)$
 Axis of Sym.: $x = 3$
 Opens: Down
 Max value = 2

312)



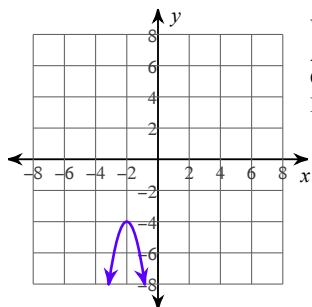
Vertex: $(2, 2)$
 Axis of Sym.: $x = 2$
 Opens: Down
 Max value = 2

313)



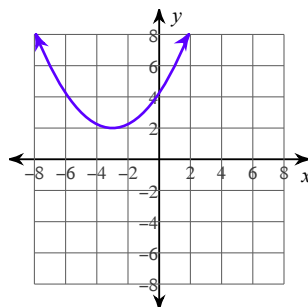
Vertex: $(-6, -6)$
 Axis of Sym.: $x = -6$
 Opens: Down
 Max value = -6

314)



Vertex: $(-2, -4)$
 Axis of Sym.: $x = -2$
 Opens: Down
 Max value = -4

315)



Vertex: $(-3, 2)$
 Axis of Sym.: $x = -3$
 Opens: Up
 Min value = 2

316) $y = (x - 1)^2 - 7$

317) $y = -8(x + 9)^2 + 6$

318) $y = (x + 2)^2 - 5$

319) $y = 3(x - 3)^2 - 5$

320) $y = 4(x - 5)^2 + 3$

321) $y = (x - 10)^2 + 4$

322) $y = -2(x - 3)^2 - 7$

323) $y = -\frac{1}{15}(x - 6)^2 - 7$

324) $y = 8(x + 10)^2 - 8$

325) $y = (x - 7)^2 + 8$

326) $y = 7(x + 5)^2 - 5$

327) $y = -(x + 10)^2 + 10$

328) $y = -4(x + 7)^2 - 10$

329) $y = 2(x - 5)^2 - 5$

330) $y = 11(x + 7)^2 + 3$

$$331) y = -\frac{1}{2}(x-1)^2 - 1$$

$$332) y = (x+4)^2 - 8$$

$$333) y = -\frac{1}{2}(x+4)^2 + 9$$

$$334) y = -3(x+3)^2 - 5$$

$$335) y = 2(x+5)^2 - 10$$

$$336) x\text{-int: } 0 \text{ and } 8$$

$$337) x\text{-int: } 4 \text{ and } 2$$

$$338) x\text{-int: } -10 \text{ and } -8$$

$$339) x\text{-int: } 5 \text{ and } -3$$

$$340) x\text{-int: } -9 \text{ and } -3$$

$$341) x\text{-int: } 5 \text{ and } -1$$

$$342) x\text{-int: } 8 \text{ and } -10$$

$$343) x\text{-int: } -10 \text{ and } -9$$

$$344) x\text{-int: } 10 \text{ and } 2$$

$$345) x\text{-int: } 6 \text{ and } -6$$

$$346) x\text{-int: } -5 \text{ and } -4$$

$$347) x\text{-int: } 0 \text{ and } -3$$

$$348) x\text{-int: } 2 \text{ and } 1$$

$$349) x\text{-int: } 2 \text{ and } -9$$

$$350) x\text{-int: } 0 \text{ and } 3$$

$$351) x\text{-int: } 1 \text{ and } -3$$

$$352) x\text{-int: } 7 \text{ and } -8$$

$$353) x\text{-int: } 10 \text{ and } 3$$

$$354) x\text{-int: } -9 \text{ and } -4$$

$$355) x\text{-int: } -7 \text{ and } -1$$

$$356) x\text{-int: } 2 \text{ and } -10$$

$$357) x\text{-int: } 7 \text{ and } -8$$

$$358) x\text{-int: } 0 \text{ and } -2$$

$$359) x\text{-int: } 7 \text{ and } -2$$

$$360) x\text{-int: } 5 \text{ and } 4$$

$$361) x\text{-int: } -10 \text{ and } -6$$

$$362) x\text{-int: } 0$$

$$363) x\text{-int: } 2$$

$$364) x\text{-int: } 0 \text{ and } 4$$

$$365) x\text{-int: } -5 \text{ and } -3$$

$$366) x\text{-int: } 8 \text{ and } 2$$

$$367) x\text{-int: } 7 \text{ and } -6$$

$$368) x\text{-int: } -8 \text{ and } -5$$

$$369) x\text{-int: } 5 \text{ and } -5$$

$$370) x\text{-int: } 1 \text{ and } -2$$

$$371) x\text{-int: } 9 \text{ and } -9$$

$$372) x\text{-int: } -1$$

$$373) x\text{-int: } 9 \text{ and } -9$$

$$374) x\text{-int: } 1 \text{ and } -4$$

$$375) x\text{-int: } 7 \text{ and } -7$$

$$376) \left\{ \frac{1}{3}, 3 \right\}$$

$$377) \left\{ \frac{3}{2}, -8 \right\}$$

$$378) \left\{ \frac{8}{3}, 2 \right\}$$

$$379) \left\{ -\frac{1}{7}, 3 \right\}$$

$$380) \left\{ -\frac{4}{3}, -5 \right\}$$

$$381) \left\{ -\frac{2}{7}, 7 \right\}$$

$$382) \left\{ -\frac{4}{7}, -3 \right\}$$

$$383) \left\{ -\frac{8}{5}, 1 \right\}$$

$$384) \left\{ \frac{2}{3}, 1 \right\}$$

$$385) \left\{ -\frac{7}{3}, \frac{4}{5} \right\}$$

$$386) \left\{ -\frac{5}{7}, \frac{8}{7} \right\}$$

$$387) \left\{ -\frac{2}{5}, -6 \right\}$$

$$388) \left\{ \frac{4}{7}, 5 \right\}$$

$$389) \left\{ \frac{6}{7}, -5 \right\}$$

$$390) \left\{ -\frac{5}{7}, 2 \right\}$$

$$391) \left\{ \frac{2}{5}, 8 \right\}$$

$$392) \left\{ \frac{8}{7}, 4 \right\}$$

$$393) \left\{ \frac{1}{7}, 6 \right\}$$

$$394) \left\{ \frac{5}{4}, -2 \right\}$$

$$395) \left\{ \frac{3}{7}, 2 \right\}$$

$$396) \left\{ -\frac{4}{5}, -2 \right\}$$

$$397) \left\{ -\frac{4}{7}, 2 \right\}$$

$$398) \left\{ -\frac{8}{3}, -\frac{5}{2} \right\}$$

$$399) \left\{ -\frac{5}{3}, 3 \right\}$$

$$400) \left\{ -\frac{6}{5}, -5 \right\}$$

$$401) \left\{ \frac{1}{7}, -\frac{7}{2} \right\}$$

$$402) \left\{ \frac{3}{2}, 2 \right\}$$

$$403) \left\{ -\frac{8}{3}, 8 \right\}$$

$$404) \left\{ \frac{7}{5}, 2 \right\}$$

$$405) \left\{ \frac{3}{2}, 3 \right\}$$

$$406) \{1, 4\}$$

$$407) \left\{ \frac{2}{3}, 6 \right\}$$

$$408) \{4, 7\}$$

$$409) \{-5, 2\}$$

$$410) \left\{ -\frac{5}{2} \right\}$$

$$411) \{1, 4\}$$

$$412) \left\{ -5, -\frac{1}{5} \right\}$$

$$413) \left\{ -\frac{4}{3}, 5 \right\}$$

$$414) \left\{ -\frac{3}{2}, \frac{5}{2} \right\}$$

$$415) \left\{ -\frac{5}{2}, 1 \right\}$$

$$416) \{3\}$$

$$417) \left\{ -\frac{2}{3}, 4 \right\}$$

$$418) \{0, -16\}$$

$$419) \left\{ -\frac{7}{2}, 1 \right\}$$

$$420) \left\{ -\frac{1}{2}, \frac{1}{3}, \frac{2}{3} \right\}$$

$$421) \left\{ \sqrt{2}, -\sqrt{2} \right\}$$

$$422) \left\{ 2\sqrt{7}, -2\sqrt{7} \right\}$$

$$423) \left\{ \sqrt{47}, -\sqrt{47} \right\}$$

$$424) \left\{ \sqrt{73}, -\sqrt{73} \right\}$$

$$425) \{2, -2\}$$

$$426) \{5, -5\}$$

$$427) \{4, -4\}$$

$$428) \{6, -6\}$$

$$429) \left\{ \sqrt{7}, -\sqrt{7} \right\}$$

$$430) \left\{ \sqrt{89}, -\sqrt{89} \right\}$$

$$431) \left\{ \sqrt{31}, -\sqrt{31} \right\}$$

$$432) \left\{ \sqrt{15}, -\sqrt{15} \right\}$$

$$433) \left\{ \sqrt{2}, -\sqrt{2} \right\}$$

$$434) \{7\sqrt{2}, -7\sqrt{2}\}$$

$$435) \{1, -1\}$$

$$436) \{10, -10\}$$

$$437) \{9, -9\}$$

$$438) \{5\sqrt{2}, -5\sqrt{2}\}$$

$$439) \{6, -6\}$$

$$440) \{2\sqrt{21}, -2\sqrt{21}\}$$

$$441) \left\{ \frac{10}{7}, -\frac{10}{7} \right\}$$

$$442) \{3\sqrt{7}, -3\sqrt{7}\}$$

$$443) \left\{ \sqrt{82}, -\sqrt{82} \right\}$$

$$444) \left\{ \frac{2}{3}, -\frac{2}{3} \right\}$$

$$445) \left\{ \sqrt{35}, -\sqrt{35} \right\}$$

$$446) \{3\sqrt{2}, -3\sqrt{2}\}$$

$$447) \{1, -1\}$$

$$448) \{2\sqrt{7}, -2\sqrt{7}\}$$

$$449) \left\{ \sqrt{43}, -\sqrt{43} \right\}$$

$$450) \{7, -7\}$$

$$451) \{2\sqrt{13}, -2\sqrt{13}\}$$

$$452) \left\{ \sqrt{13}, -\sqrt{13} \right\}$$

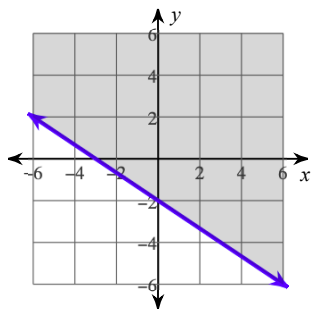
- 453) $\left\{\frac{5}{2}, -\frac{5}{2}\right\}$ 454) $\left\{\frac{2}{3}, -\frac{2}{3}\right\}$ 455) $\{3\sqrt{3}, -3\sqrt{3}\}$ 456) $\{\sqrt{77}, -\sqrt{77}\}$
- 457) $\{3\sqrt{6}, -3\sqrt{6}\}$ 458) $\left\{\frac{5}{4}, -\frac{5}{4}\right\}$ 459) $\{10, -10\}$ 460) $\left\{\frac{7}{6}, -\frac{7}{6}\right\}$
- 461) $\{2\sqrt{22}, -2\sqrt{22}\}$ 462) $\left\{\frac{9}{7}, -\frac{9}{7}\right\}$ 463) $\left\{\frac{5}{4}, -\frac{5}{4}\right\}$ 464) $\{1, -1\}$
- 465) $\left\{\frac{1}{7}, -\frac{1}{7}\right\}$ 466) $\{\sqrt{22}, -\sqrt{22}\}$ 467) $\{2\sqrt{13}, -2\sqrt{13}\}$ 468) $\{1, -1\}$
- 469) $\{\sqrt{62}, -\sqrt{62}\}$ 470) $\{1, -1\}$ 471) $\left\{\frac{i\sqrt{26}}{2}, -\frac{i\sqrt{26}}{2}\right\}$ 472) $\{2i\sqrt{3}, -2i\sqrt{3}\}$
- 473) $\left\{\frac{i\sqrt{14}}{2}, -\frac{i\sqrt{14}}{2}\right\}$ 474) $\left\{\frac{i\sqrt{31}}{2}, -\frac{i\sqrt{31}}{2}\right\}$ 475) $\left\{\frac{i\sqrt{70}}{2}, -\frac{i\sqrt{70}}{2}\right\}$
- 476) $\left\{\frac{\sqrt{1410}}{10}, -\frac{\sqrt{1410}}{10}\right\}$ 477) $\left\{\frac{i\sqrt{43}}{3}, -\frac{i\sqrt{43}}{3}\right\}$ 478) $\left\{\frac{i\sqrt{15}}{3}, -\frac{i\sqrt{15}}{3}\right\}$
- 479) $\{i\sqrt{17}, -i\sqrt{17}\}$ 480) $\left\{\frac{i\sqrt{85}}{2}, -\frac{i\sqrt{85}}{2}\right\}$ 481) $\left\{\frac{i\sqrt{6}}{2}, -\frac{i\sqrt{6}}{2}\right\}$
- 482) $\left\{\frac{i\sqrt{177}}{3}, -\frac{i\sqrt{177}}{3}\right\}$ 483) $\{i\sqrt{13}, -i\sqrt{13}\}$ 484) $\left\{\frac{\sqrt{1330}}{10}, -\frac{\sqrt{1330}}{10}\right\}$
- 485) $\left\{\frac{4\sqrt{15}}{5}, -\frac{4\sqrt{15}}{5}\right\}$ 486) $\{i\sqrt{6}, -i\sqrt{6}\}$ 487) $\left\{\frac{3\sqrt{14}}{7}, -\frac{3\sqrt{14}}{7}\right\}$
- 488) $\left\{\frac{2i\sqrt{30}}{5}, -\frac{2i\sqrt{30}}{5}\right\}$ 489) $\left\{\frac{i\sqrt{22}}{2}, -\frac{i\sqrt{22}}{2}\right\}$ 490) $\{4i, -4i\}$
- 491) x-int: 0 and 2 492) x-int: 3 and 1 493) x-int: None 494) x-int: None
- 495) x-int: 8 and -10 496) x-int: 10 and -6 497) x-int: -7 and -6 498) x-int: 9 and -10
- 499) x-int: 10 and -5 500) x-int: 7 and 6 501) x-int: 3 and -2 502) x-int: None
- 503) x-int: -8 and -7 504) x-int: None 505) x-int: -3 and -2 506) x-int: 5 and -10
- 507) x-int: 6 and -5 508) x-int: 7 and -2 509) x-int: None 510) $\{23, -3\}$
- 511) $\{-2 + 5\sqrt{3}, -2 - 5\sqrt{3}\}$ 512) $\{-1 + \sqrt{69}, -1 - \sqrt{69}\}$ 513) $\{7 + 5\sqrt{5}, 7 - 5\sqrt{5}\}$
- 514) $\{4, -20\}$ 515) $\{-2 + 2\sqrt{26}, -2 - 2\sqrt{26}\}$ 516) $\{16, -4\}$
- 517) $\{-4 + \sqrt{19}, -4 - \sqrt{19}\}$ 518) $\{8, 2\}$ 519) $\{1, -3\}$
- 520) $\{1, -3\}$ 521) $\{4, -2\}$ 522) $\{3, -1\}$
- 523) $\left\{\frac{10 + \sqrt{70}}{10}, \frac{10 - \sqrt{70}}{10}\right\}$ 524) $\left\{\frac{-10 + \sqrt{430}}{10}, \frac{-10 - \sqrt{430}}{10}\right\}$
- 525) $\left\{\frac{5 + 7\sqrt{5}}{5}, \frac{5 - 7\sqrt{5}}{5}\right\}$ 526) $\left\{\frac{10 + \sqrt{290}}{10}, \frac{10 - \sqrt{290}}{10}\right\}$ 527) $\left\{\frac{-3 + 2\sqrt{33}}{3}, \frac{-3 - 2\sqrt{33}}{3}\right\}$
- 528) $\left\{\frac{-5 + 7\sqrt{10}}{5}, \frac{-5 - 7\sqrt{10}}{5}\right\}$ 529) $\{3, -13\}$ 530) $\left\{\frac{7 + \sqrt{182}}{7}, \frac{7 - \sqrt{182}}{7}\right\}$
- 531) $\left\{\frac{7 + 3\sqrt{21}}{7}, \frac{7 - 3\sqrt{21}}{7}\right\}$ 532) $\{1, -3\}$ 533) $\left\{\frac{5 + 6\sqrt{5}}{5}, \frac{5 - 6\sqrt{5}}{5}\right\}$
- 534) $\left\{\frac{8}{3}, -\frac{2}{3}\right\}$ 535) $\{2 + \sqrt{7}, 2 - \sqrt{7}\}$ 536) $\left\{\frac{3 + 5\sqrt{3}}{3}, \frac{3 - 5\sqrt{3}}{3}\right\}$
- 537) $\{6, -4\}$ 538) $\left\{\frac{9 + 2\sqrt{42}}{3}, \frac{9 - 2\sqrt{42}}{3}\right\}$ 539) $\left\{\frac{-3 + \sqrt{22}}{3}, \frac{-3 - \sqrt{22}}{3}\right\}$
- 540) $\left\{\frac{9}{2}, -3\right\}$ 541) $\{12, -3\}$

$$\begin{array}{lll}
542) \left\{ \frac{6 + \sqrt{151}}{5}, \frac{6 - \sqrt{151}}{5} \right\} & 543) \left\{ \frac{-2 + 2\sqrt{43}}{3}, \frac{-2 - 2\sqrt{43}}{3} \right\} & 544) \left\{ \frac{23}{4}, -2 \right\} \\
545) \left\{ \frac{17 + \sqrt{1513}}{12}, \frac{17 - \sqrt{1513}}{12} \right\} & 546) \left\{ -2, -\frac{5}{2} \right\} & \\
547) \left\{ \frac{-5 + \sqrt{3}}{4}, \frac{-5 - \sqrt{3}}{4} \right\} & 548) \left\{ \frac{-1 + 7\sqrt{29}}{10}, \frac{-1 - 7\sqrt{29}}{10} \right\} & 549) \left\{ 1, \frac{1}{8} \right\} \\
550) \left\{ 5, -\frac{15}{2} \right\} & 551) \left\{ \frac{15}{7}, -4 \right\} & 552) \left\{ \frac{12}{5}, -2 \right\} \\
553) \left\{ 5, \frac{2}{3} \right\} & & \\
554) \left\{ \frac{21}{2}, -2 \right\} & 555) \left\{ \frac{1 + \sqrt{51}}{3}, \frac{1 - \sqrt{51}}{3} \right\} & 556) \left\{ -\frac{1}{2}, -1 \right\} \\
557) \left\{ 2, -\frac{9}{4} \right\} & 558) \left\{ \frac{8 + \sqrt{211}}{7}, \frac{8 - \sqrt{211}}{7} \right\} & 559) \left\{ \frac{9}{5}, -\frac{3}{2} \right\} \\
560) \left\{ \frac{3}{2}, -2 \right\} & 561) \left\{ \frac{13 + \sqrt{737}}{4}, \frac{13 - \sqrt{737}}{4} \right\} & 562) \{12, 3\} \\
563) \left\{ \frac{9 + i\sqrt{1123}}{14}, \frac{9 - i\sqrt{1123}}{14} \right\} & 564) \left\{ \frac{-1 + \sqrt{85}}{2}, \frac{-1 - \sqrt{85}}{2} \right\} & \\
565) \left\{ \frac{-1 + i\sqrt{47}}{2}, \frac{-1 - i\sqrt{47}}{2} \right\} & 566) \left\{ \frac{-1 + \sqrt{105}}{2}, \frac{-1 - \sqrt{105}}{2} \right\} & \\
567) \left\{ \frac{-19 + \sqrt{109}}{6}, \frac{-19 - \sqrt{109}}{6} \right\} & 568) \left\{ \frac{-7 + 5i\sqrt{7}}{8}, \frac{-7 - 5i\sqrt{7}}{8} \right\} & \\
569) \left\{ \frac{13 + i\sqrt{803}}{18}, \frac{13 - i\sqrt{803}}{18} \right\} & 570) \left\{ \frac{1 + \sqrt{73}}{2}, \frac{1 - \sqrt{73}}{2} \right\} & \\
571) \left\{ \frac{-11 + \sqrt{113}}{2}, \frac{-11 - \sqrt{113}}{2} \right\} & 572) \left\{ \frac{7 + \sqrt{13}}{2}, \frac{7 - \sqrt{13}}{2} \right\} & \\
573) \left\{ \frac{5 + i\sqrt{61}}{2}, \frac{5 - i\sqrt{61}}{2} \right\} & 574) \{2, -7\} & \\
575) \left\{ \frac{-13 + i\sqrt{159}}{2}, \frac{-13 - i\sqrt{159}}{2} \right\} & 576) \left\{ \frac{7 + i\sqrt{179}}{2}, \frac{7 - i\sqrt{179}}{2} \right\} & \\
577) \left\{ \frac{-5 + 5i\sqrt{31}}{4}, \frac{-5 - 5i\sqrt{31}}{4} \right\} & 578) \left\{ \frac{7}{2}, 2 \right\} & \\
579) \left\{ \frac{17 + i\sqrt{35}}{2}, \frac{17 - i\sqrt{35}}{2} \right\} & 580) \{5, -5\} & 581) \left\{ \frac{-3 + \sqrt{377}}{8}, \frac{-3 - \sqrt{377}}{8} \right\} \\
582) \{7, -7\} & 583) \left\{ \frac{-5 + \sqrt{253}}{6}, \frac{-5 - \sqrt{253}}{6} \right\} & 584) \left\{ \frac{11}{3}, -2 \right\} \\
585) \left\{ \frac{\sqrt{42}}{6}, -\frac{\sqrt{42}}{6} \right\} & 586) \{1, -1\} & 587) \{14, -6\} \\
588) \left\{ \frac{5}{2}, -3 \right\} & & \\
589) \left\{ \frac{3 + \sqrt{57}}{4}, \frac{3 - \sqrt{57}}{4} \right\} & 590) \{2, 3\} & 591) \left\{ \frac{-5 + \sqrt{3}}{11}, \frac{-5 - \sqrt{3}}{11} \right\} \\
592) \left\{ \frac{11 + \sqrt{349}}{6}, \frac{11 - \sqrt{349}}{6} \right\} & 593) \left\{ \frac{7 - \sqrt{689}}{16}, \frac{7 + \sqrt{689}}{16} \right\} & 594) \left\{ \frac{-4 + \sqrt{163}}{7}, \frac{-4 - \sqrt{163}}{7} \right\} \\
595) \left\{ -1, -\frac{5}{6} \right\} & 596) \{-3, 13\} & 597) \{-11, 2\} \\
598) \left\{ -\frac{9}{2}, 3 \right\} & &
\end{array}$$

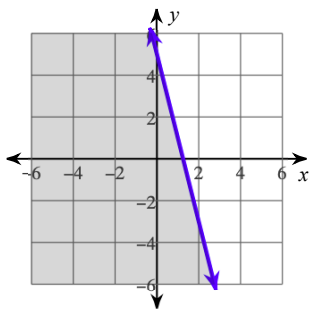
$$\begin{array}{lll}
599) \left\{ \frac{-3-4\sqrt{2}}{2}, \frac{-3+4\sqrt{2}}{2} \right\} & 600) \left\{ \frac{6+\sqrt{38}}{2}, \frac{6-\sqrt{38}}{2} \right\} & 601) \{6, -11\} \\
602) \left\{ \frac{26}{5}, -5 \right\} & 603) \left\{ \frac{3+\sqrt{15}}{2}, \frac{3-\sqrt{15}}{2} \right\} & 604) \left\{ -\frac{\sqrt{230}}{10}, \frac{\sqrt{230}}{10} \right\} \\
605) \left\{ -\frac{1}{2}, \frac{1}{3} \right\} & 606) \left\{ 1, -\frac{6}{5} \right\} & 607) \left\{ \frac{1}{3}, 1 \right\} \\
608) \{5, -5\} \\
609) \left\{ \frac{5+\sqrt{985}}{20}, \frac{5-\sqrt{985}}{20} \right\} & 610) \left\{ \frac{\sqrt{5}}{5}, -\frac{\sqrt{5}}{5} \right\} & 611) \left\{ \frac{1+\sqrt{11}}{4}, \frac{1-\sqrt{11}}{4} \right\} \\
612) \left\{ \frac{i\sqrt{7}}{3}, -\frac{i\sqrt{7}}{3} \right\} & 613) \left\{ 7, -\frac{11}{2} \right\} & 614) \left\{ \frac{7-i\sqrt{527}}{24}, \frac{7+i\sqrt{527}}{24} \right\} \\
615) \{8, -14\} & 616) \left\{ \frac{2-i\sqrt{95}}{11}, \frac{2+i\sqrt{95}}{11} \right\} & 617) \left\{ \frac{-3+3\sqrt{2}}{2}, \frac{-3-3\sqrt{2}}{2} \right\} \\
618) \{-5\} & 619) \left\{ \frac{-9+i\sqrt{447}}{22}, \frac{-9-i\sqrt{447}}{22} \right\} & 620) \left\{ -\frac{\sqrt{14}}{7}, \frac{\sqrt{14}}{7} \right\} \\
621) \{-6, 6\} & 622) \{6, -6\} & 623) \left\{ \frac{1+i\sqrt{319}}{20}, \frac{1-i\sqrt{319}}{20} \right\} \\
624) \{10, -6\} & 625) \left\{ \frac{-1-i\sqrt{47}}{8}, \frac{-1+i\sqrt{47}}{8} \right\} & \\
626) \left\{ \frac{-1-i\sqrt{359}}{20}, \frac{-1+i\sqrt{359}}{20} \right\} & 627) \left\{ \frac{1+i\sqrt{2}}{3}, \frac{1-i\sqrt{2}}{3} \right\} & \\
628) \left\{ \frac{-11+\sqrt{53}}{2}, \frac{-11-\sqrt{53}}{2} \right\} & 629) \left\{ 2, -\frac{8}{3} \right\} & 630) \{2\} \\
631) \{2\} & 632) \{-1\} & 633) \{6, -1\} \\
634) \{1, -1\} & 635) \{-2, -1\} & 636) \left\{ \frac{1}{4} \right\} \\
637) \{10, 2\} & 638) \{1\} \\
639) \left\{ -\frac{1}{3} \right\} & 640) \left\{ -\frac{5}{6} \right\} & 641) \{1, -3\} \\
642) \{1, -7\} & 643) \left\{ -\frac{3}{2}, -\frac{5}{4} \right\} & 644) \{1, -3\} \\
645) \left\{ -\frac{3}{2}, -\frac{1}{2} \right\} & 646) \left\{ 1, -\frac{11}{6} \right\} & 647) \left\{ -\frac{18}{5} \right\} \\
648) \left\{ \frac{9}{2}, \frac{8}{3} \right\} & 649) \left\{ -1, -\frac{11}{6} \right\} & 650) \left\{ 5, -\frac{1}{2} \right\} \\
651) \left\{ \frac{24}{5} \right\} & 652) \left\{ \frac{3}{2} \right\} & 653) \left\{ -1, -\frac{27}{5} \right\} \\
654) \left\{ \frac{9}{2}, -6 \right\} & 655) \{5, 1\} & 656) \{12\} \\
657) \left\{ \frac{3}{2}, -1 \right\} & 658) \left\{ -\frac{9}{4} \right\} & 659) \{-1\} \\
660) \{1, -1\} & 661) \left\{ -\frac{9}{4} \right\} & 662) \left\{ 1, -\frac{6}{5} \right\} \\
663) \{1, -1\} & 664) \{12\} & 665) \{-6, -3\} \\
666) \left\{ 0, \frac{7}{4} \right\} & 667) \{-3\} & 668) \left\{ \frac{27}{4} \right\} \\
669) \{6\} & 670) \left\{ 2, -\frac{11}{2} \right\} & 671) \left\{ -\frac{11}{3} \right\} \\
672) \left\{ -\frac{13}{3} \right\} & 673) \{-8\} & 674) \left\{ -\frac{11}{2} \right\} \\
675) \left\{ -\frac{3}{2} \right\} & 676) \{-3\} & 677) \left\{ 5, 2 \right\} \\
678) \left\{ -\frac{3}{2} \right\} & &
\end{array}$$

- 679) $\left\{1, -\frac{3}{2}\right\}$
683) $\left\{\frac{18}{5}\right\}$
687) $\left\{\frac{1}{3}, -\frac{7}{2}\right\}$
691) $\{4, -4\}$
695) $\{3, -6\}$
699) $\left\{\frac{1}{5}\right\}$
703) $\{2, -2\}$
707) $\{0, -1\}$
711) $\left\{-\frac{17}{3}\right\}$
715) $\{4, -8\}$
719) $\left\{\frac{1}{2}, -\frac{3}{2}\right\}$
723) $\{1, -12\}$
727) $\left\{\frac{5}{4}\right\}$
731) $\{6, 7\}$
735) $\{5\}$
739) $\{9, 10\}$
743) $\{8\}$
747) $\{7\}$
751) $\{5, 4\}$
755) $\{10\}$
759) No solution.
763) $\{-1\}$
767) $\{8\}$
771) No solution.
775) $\{2\}$
779) $\{0, -2\}$
783) $\{3\}$
787) $\{6\}$
791) $\{7, 3\}$
795) $\{3\}$
799) $\{1\}$
803) $\{2\}$
807) $\{1\}$
- 680) $\{1\}$
684) $\left\{-\frac{16}{5}\right\}$
688) $\{0, -10\}$
692) $\{-1\}$
696) $\left\{\frac{22}{5}\right\}$
700) $\left\{0, -\frac{5}{4}\right\}$
704) $\left\{\frac{4}{3}\right\}$
708) $\left\{\frac{75}{4}\right\}$
712) $\{13\}$
716) $\left\{-\frac{7}{4}\right\}$
720) $\left\{\frac{3}{4}\right\}$
724) $\{-4\}$
728) $\left\{\frac{11}{3}\right\}$
732) $\{0, 7\}$
736) $\{2\}$
740) $\{0, 8\}$
744) $\{0, 10\}$
748) $\{1\}$
752) $\{5, 6\}$
756) $\{3, 1\}$
760) $\{7, 3\}$
764) No solution.
768) $\{8\}$
772) $\{1\}$
776) $\{5\}$
780) $\{3, 1\}$
784) No solution.
788) $\{3\}$
792) $\{-1\}$
796) $\{-4\}$
800) No solution.
804) $\{0\}$
808) $\{-2\}$
- 681) $\{20\}$
685) $\{1\}$
689) $\left\{\frac{1}{3}, -\frac{7}{2}\right\}$
693) $\{7\}$
697) $\{3, -2\}$
701) $\left\{\frac{1}{2}\right\}$
705) $\{-5\}$
709) $\{2, -4\}$
713) $\left\{\frac{4}{3}\right\}$
717) $\{-3\}$
721) $\left\{\frac{19}{3}\right\}$
725) $\{5, 1\}$
729) $\left\{\frac{7}{4}, -2\right\}$
733) $\{4, 6\}$
737) $\{9, 3\}$
741) $\{0, 5\}$
745) $\{2\}$
749) $\{6\}$
753) $\{4\}$
757) $\{9, 3\}$
761) $\{7\}$
765) $\{6, 7\}$
769) $\{4\}$
773) $\{-1\}$
777) $\{4\}$
781) $\{-7, -3\}$
785) No solution.
789) $\{-8\}$
793) $\{3\}$
797) $\{-1\}$
801) $\left\{-3, -\frac{9}{4}\right\}$
805) $\{4\}$
809) $\{1\}$
- 682) $\{0, 8\}$
686) $\{-3\}$
690) $\{8\}$
694) $\{-4\}$
698) $\left\{\frac{8}{3}, -3\right\}$
702) $\{-23\}$
706) $\{4, -1\}$
710) $\{-9\}$
714) $\{-21\}$
718) $\left\{1, -\frac{1}{2}\right\}$
722) $\{7\}$
726) $\{-11\}$
730) $\{9\}$
734) $\{7, 3\}$
738) $\{2\}$
742) $\{0, 1\}$
746) $\{4\}$
750) $\{4\}$
754) $\{9\}$
758) $\{9\}$
762) $\{9\}$
766) $\{7\}$
770) No solution.
774) $\{8, 4\}$
778) No solution.
782) No solution.
786) $\{5\}$
790) $\{4\}$
794) $\{-5, -1\}$
798) $\{3\}$
802) $\{2, 1\}$
806) $\{3, 1\}$

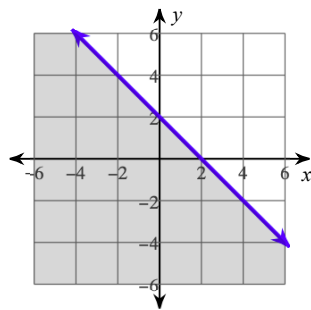
810)



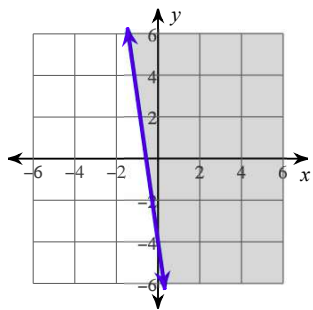
811)



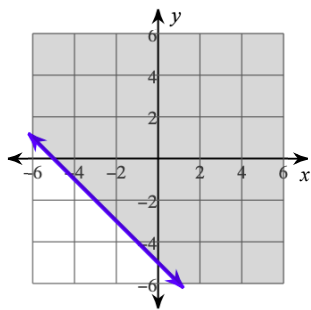
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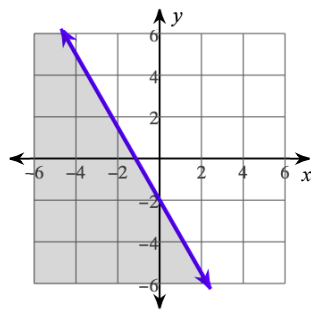
813)



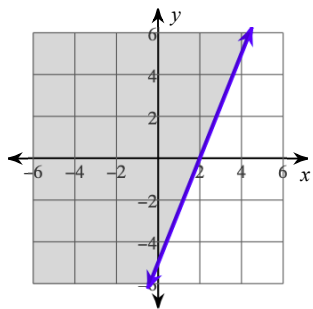
814)



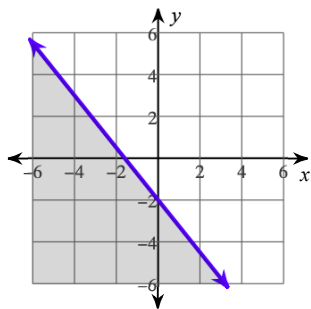
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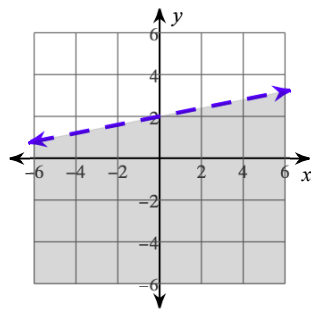
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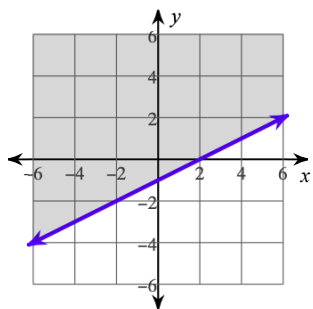
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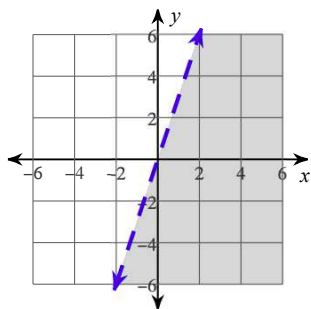
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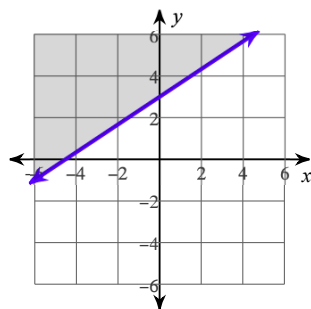
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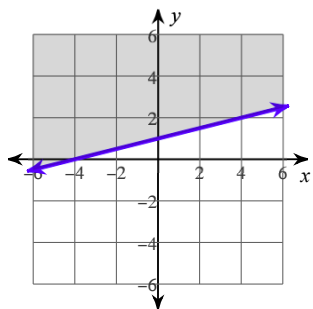
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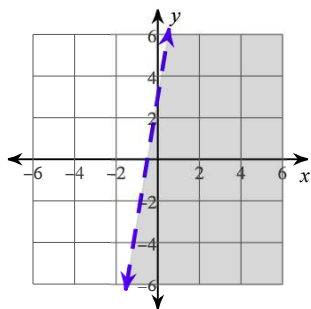
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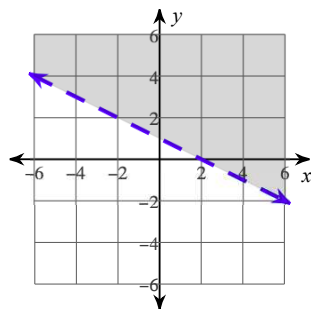
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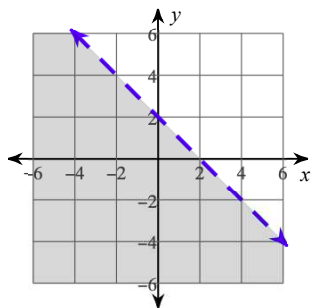
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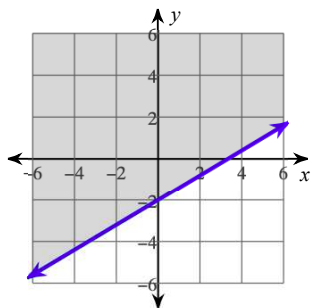
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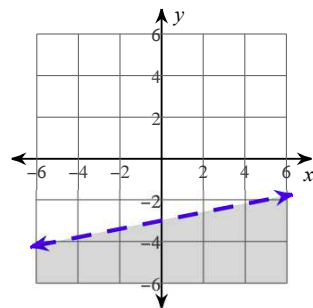
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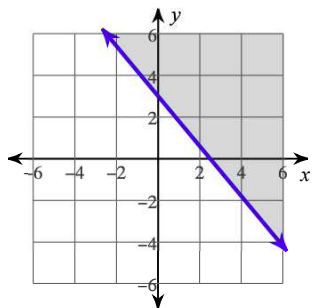
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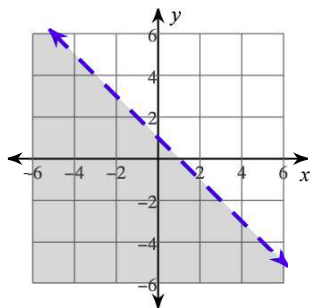
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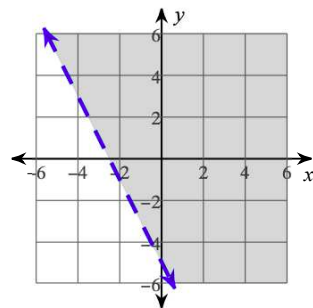
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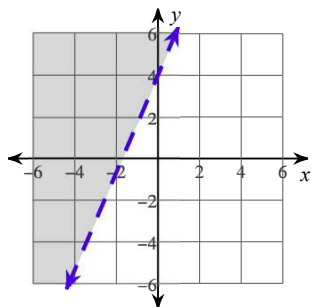
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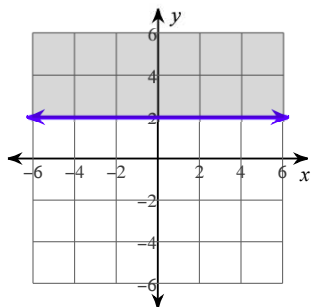
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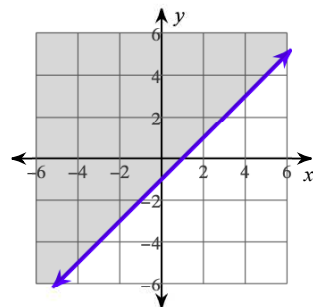
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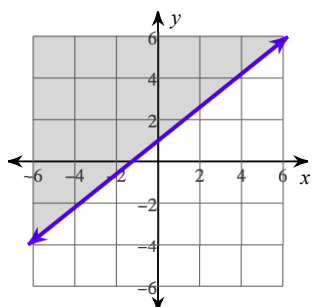
832)



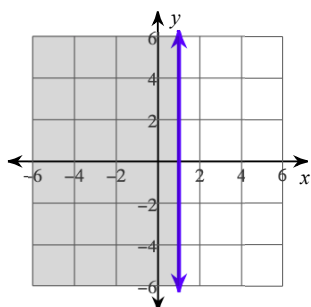
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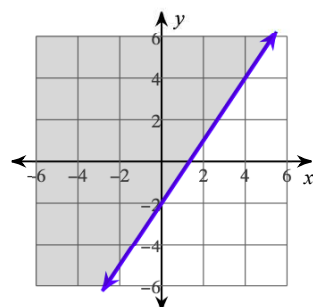
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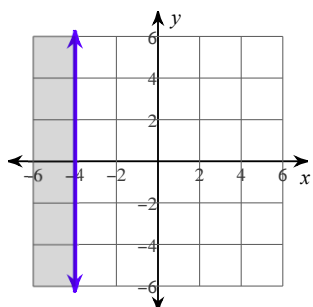
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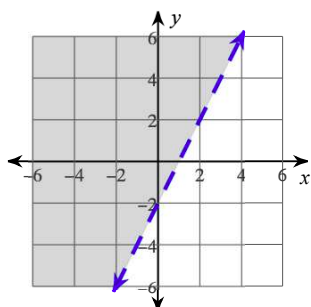
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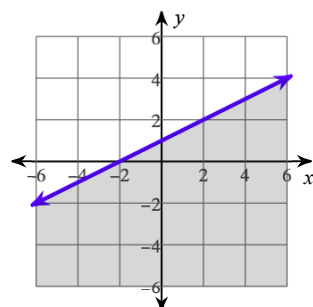
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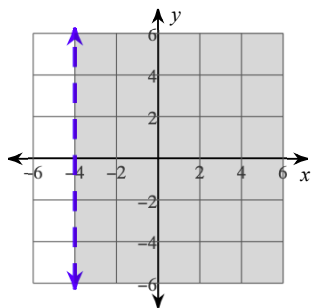
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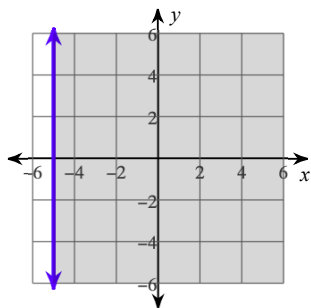
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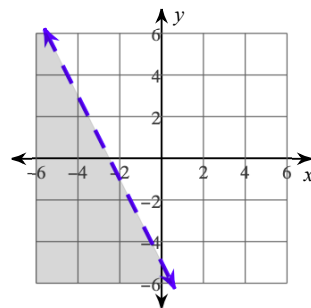
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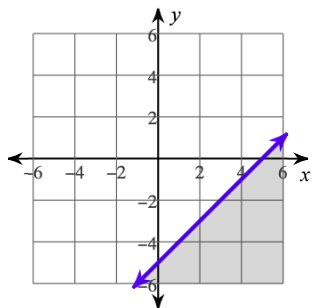
841)



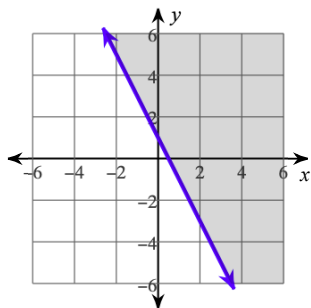
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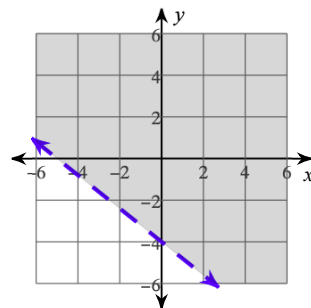
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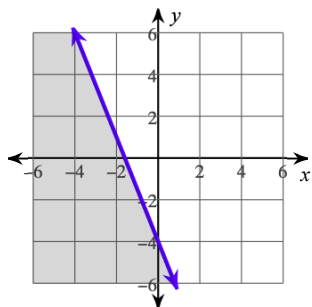
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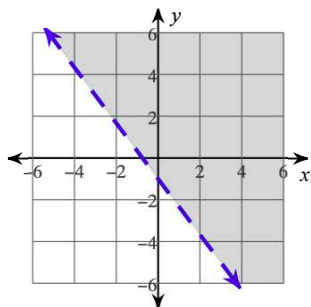
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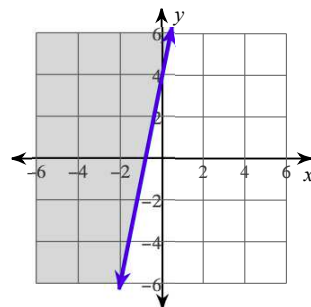
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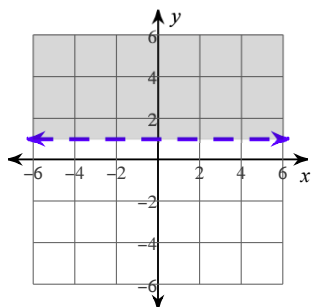
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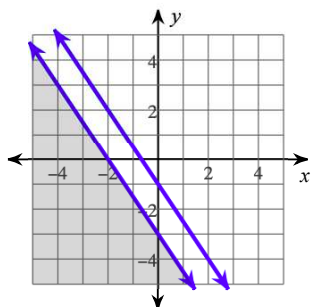
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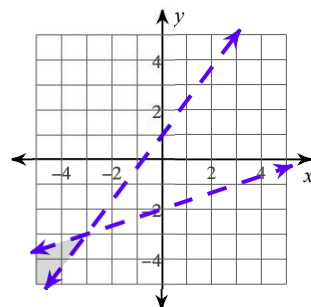
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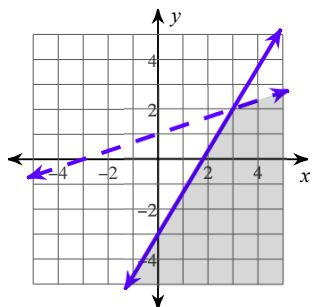
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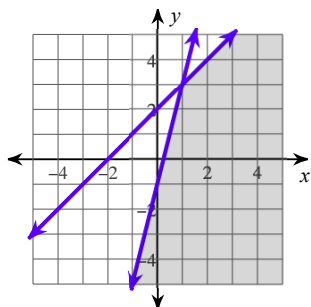
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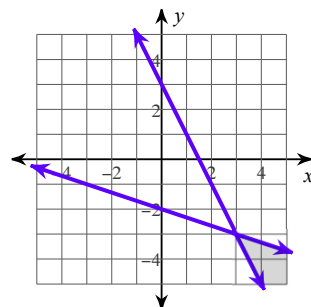
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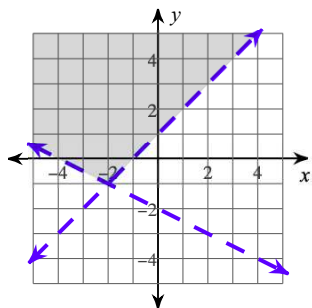
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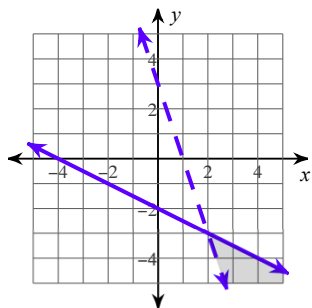
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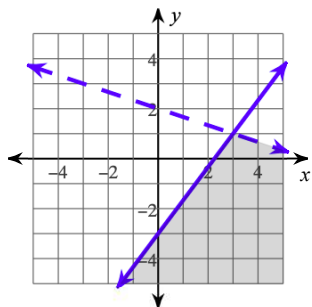
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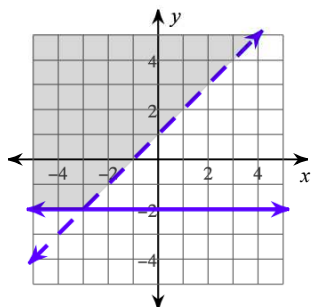
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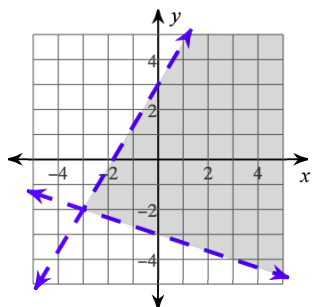
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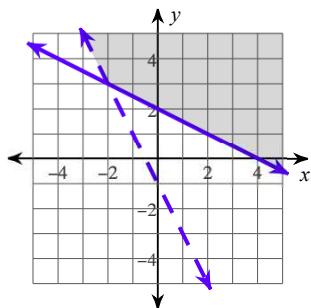
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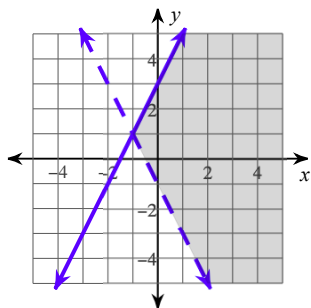
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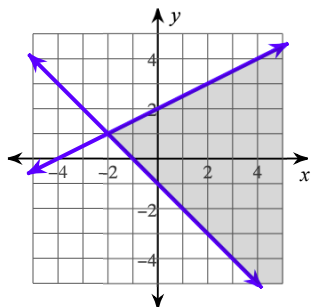
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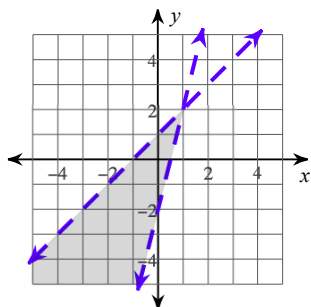
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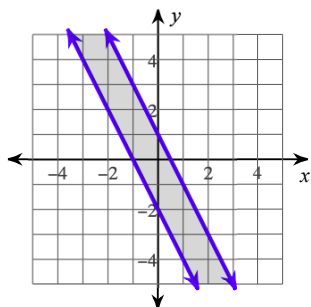
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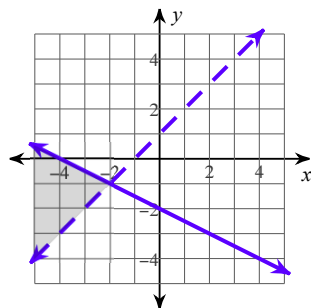
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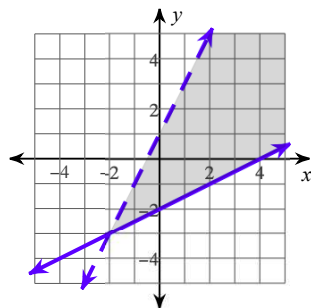
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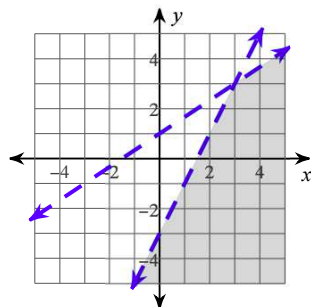
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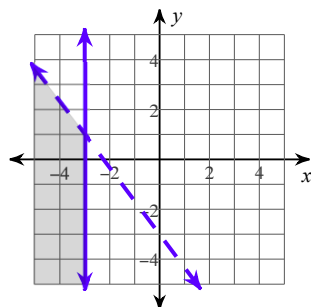
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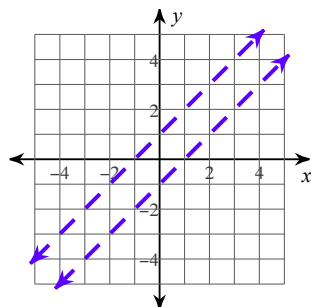
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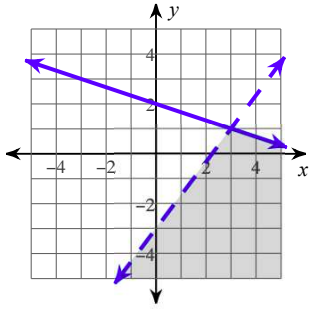
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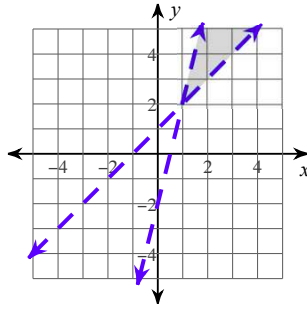
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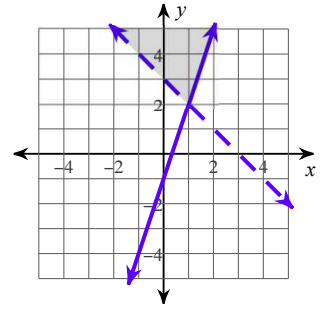
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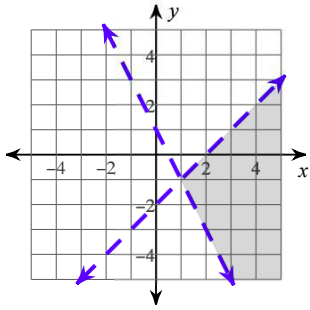
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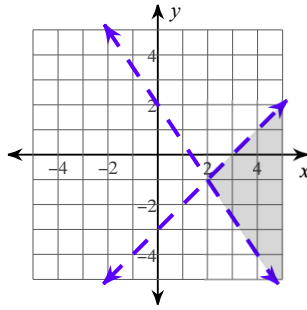
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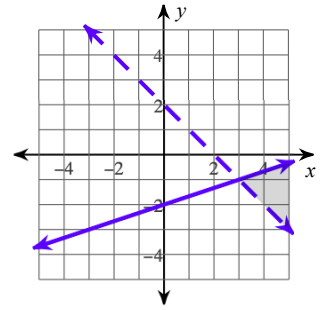
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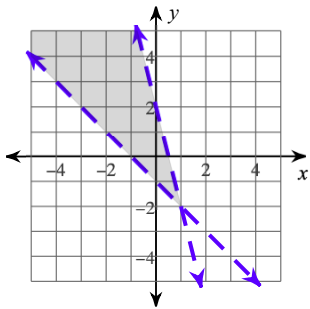
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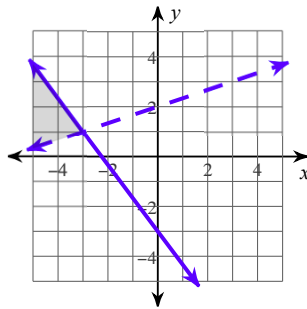
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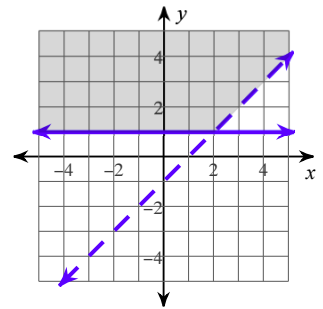
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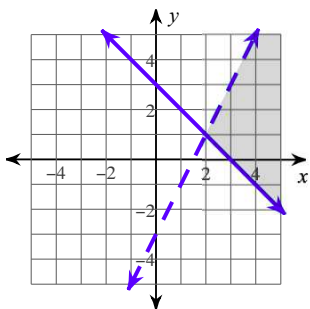
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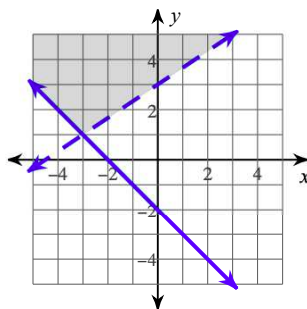
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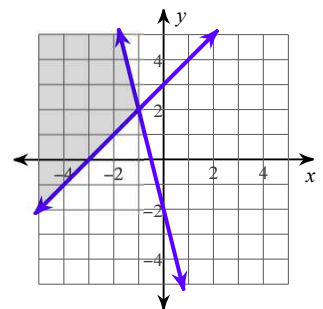
879)



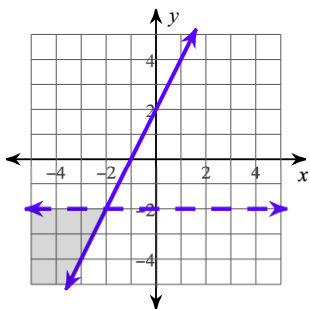
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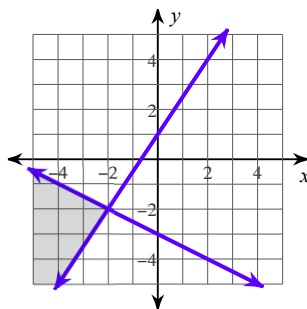
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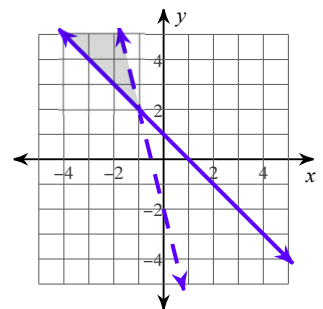
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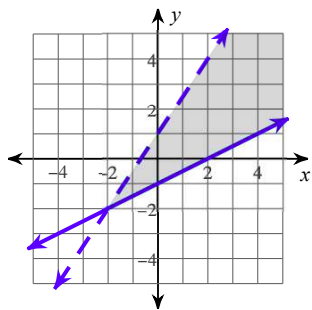
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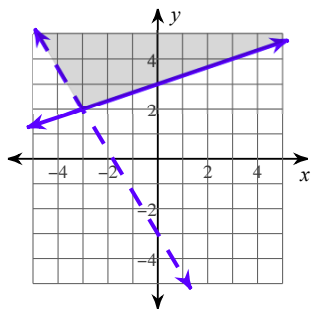
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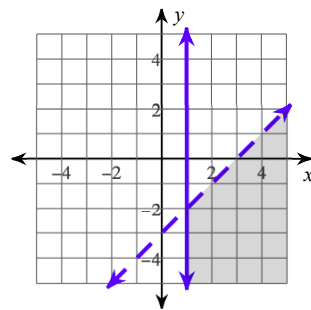
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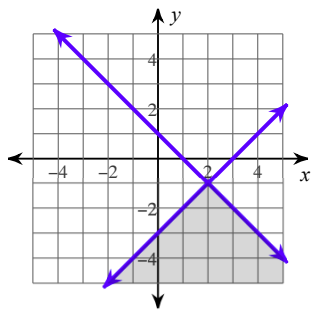
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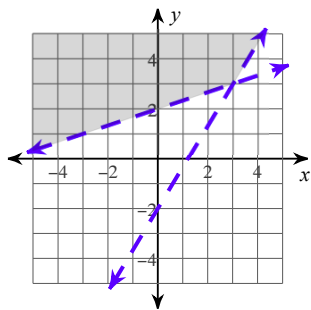
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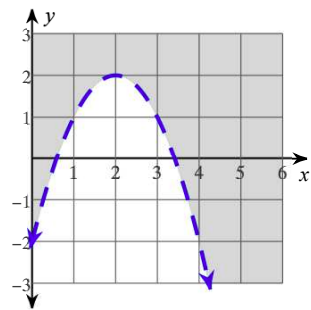
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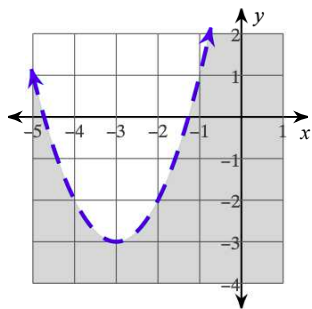
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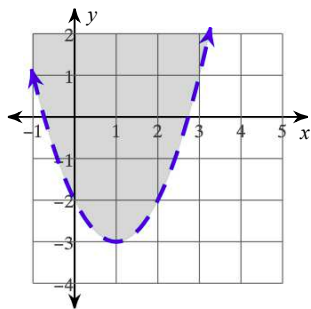
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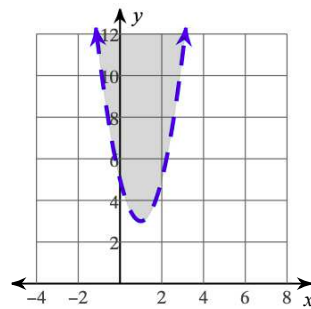
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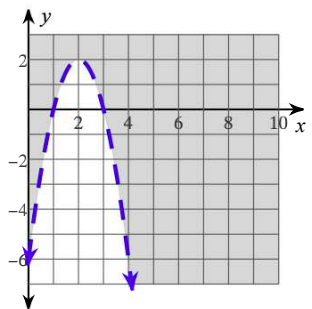
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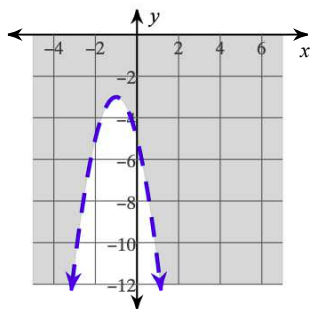
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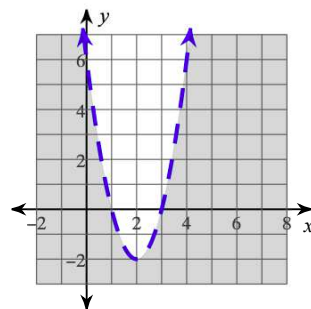
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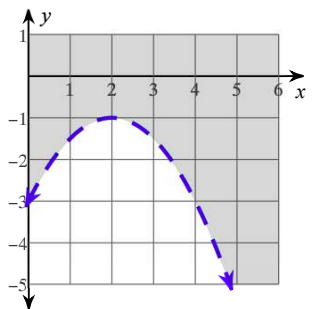
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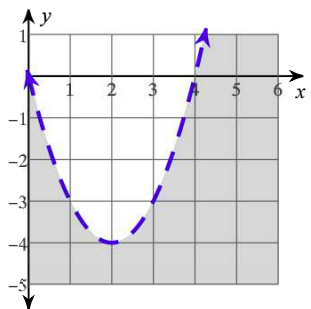
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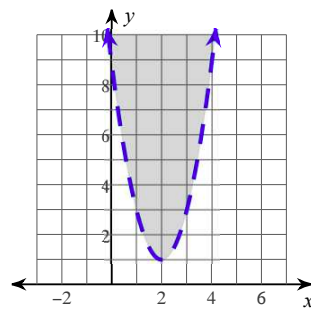
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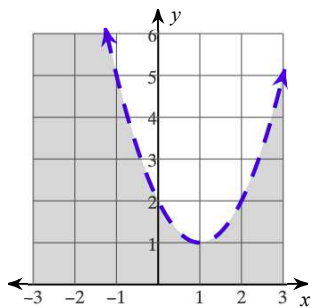
898)



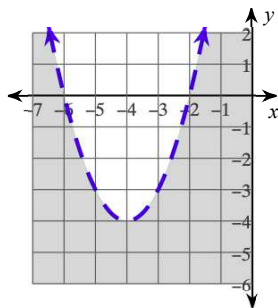
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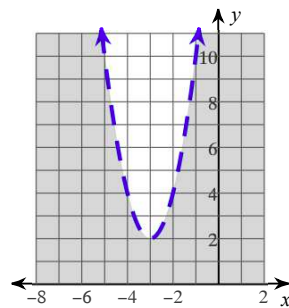
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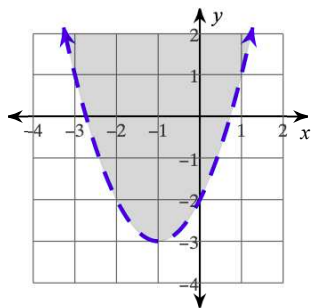
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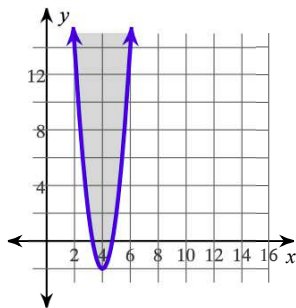
902)



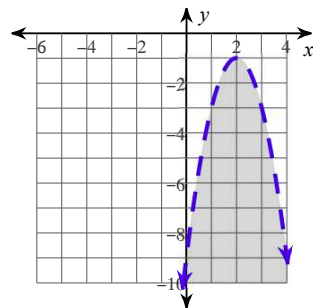
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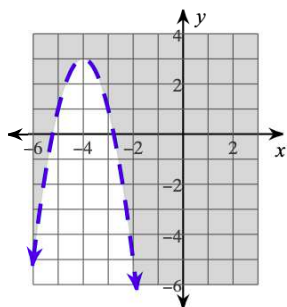
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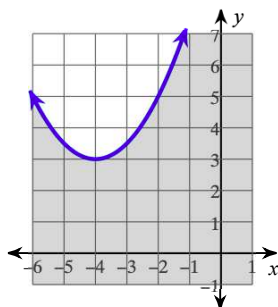
905)



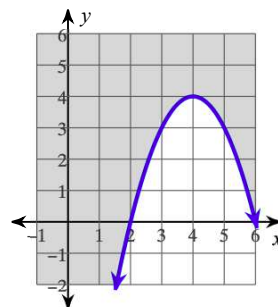
906)



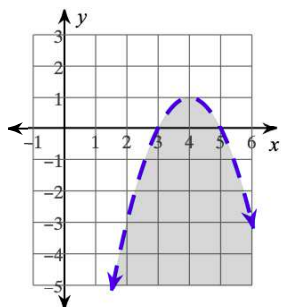
907)



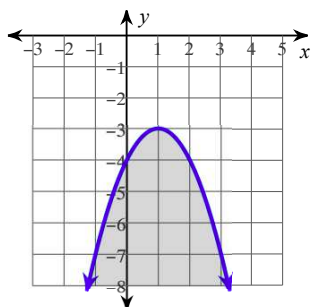
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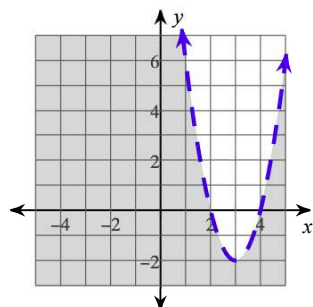
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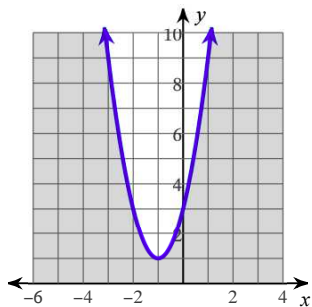
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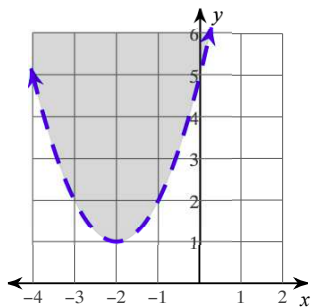
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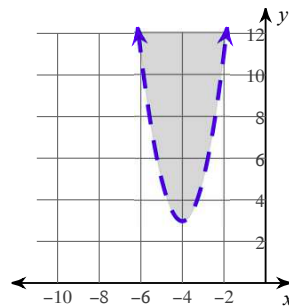
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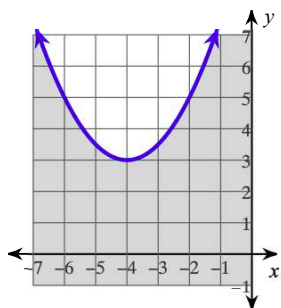
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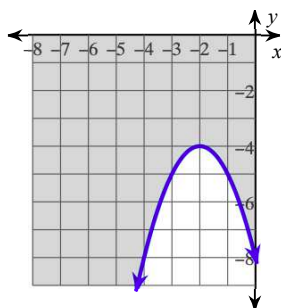
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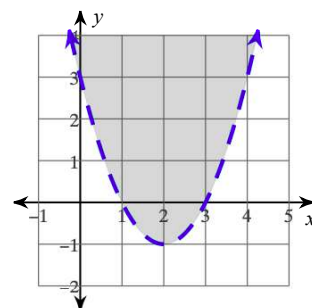
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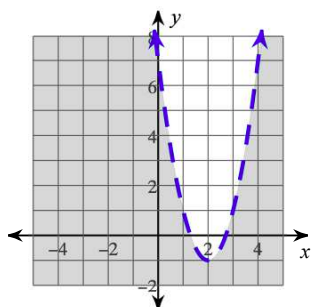
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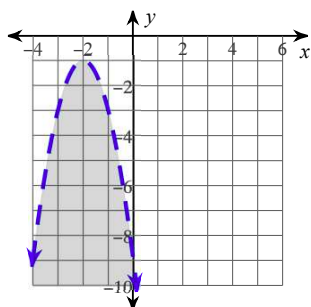
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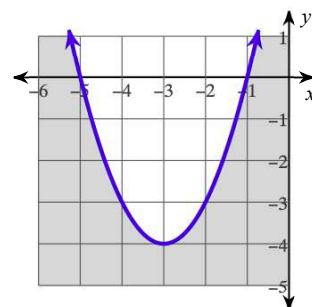
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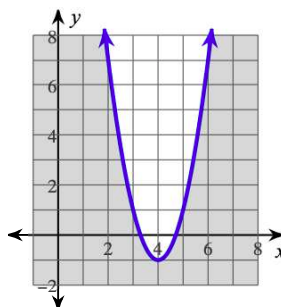
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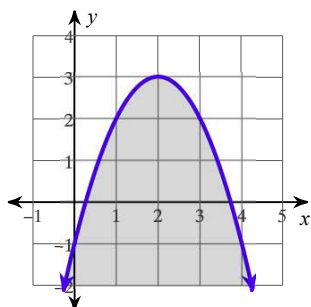
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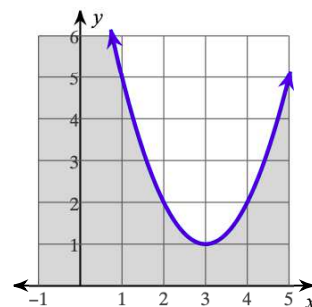
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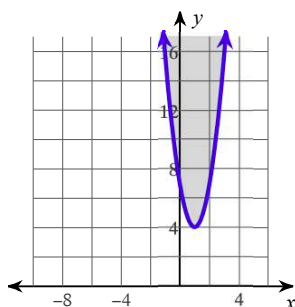
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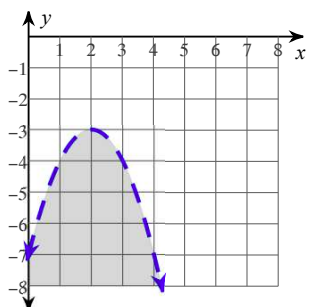
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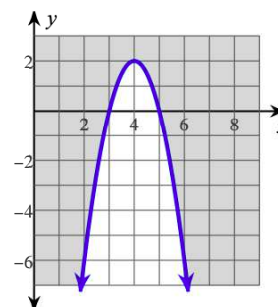
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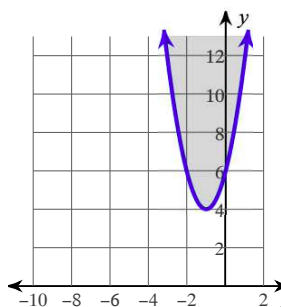
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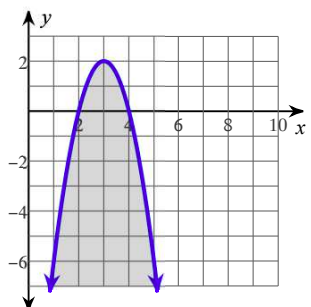
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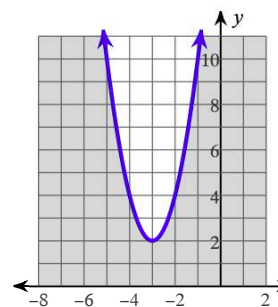
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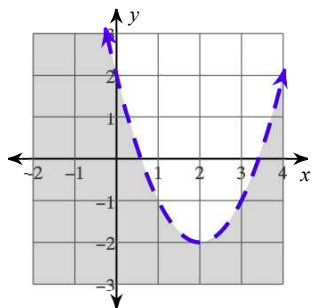
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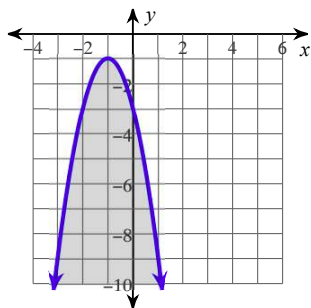
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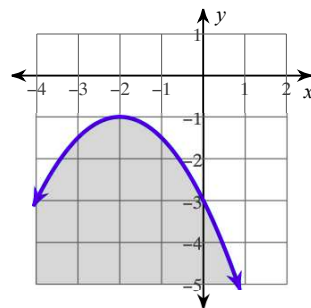
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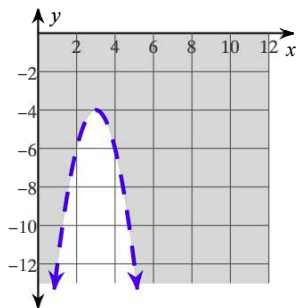
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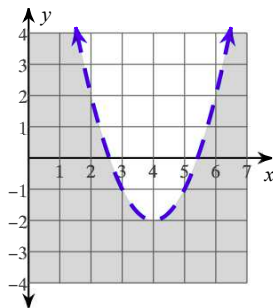
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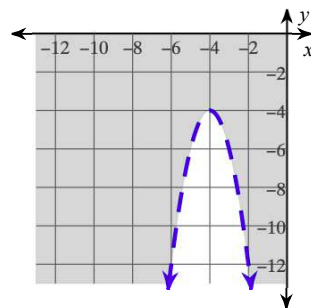
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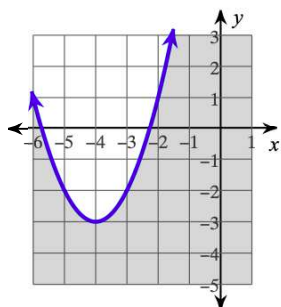
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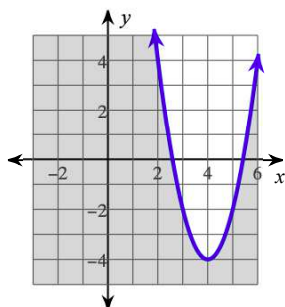
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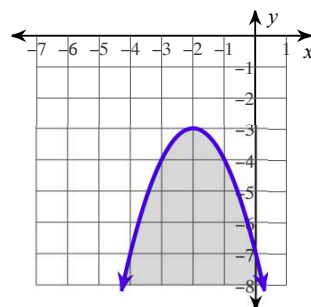
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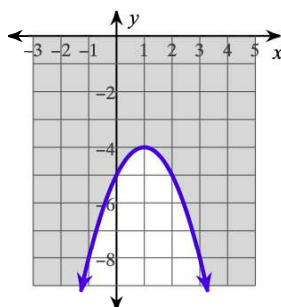
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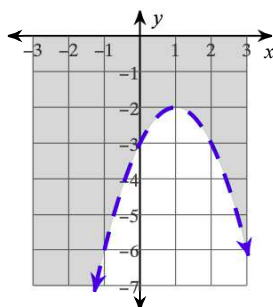
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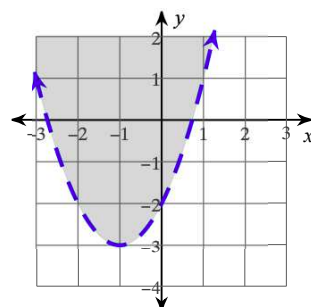
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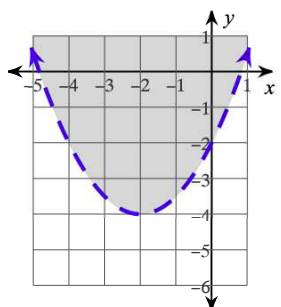
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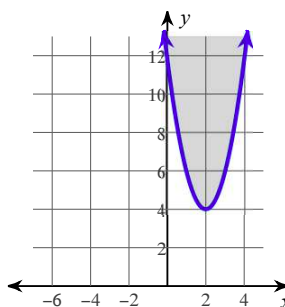
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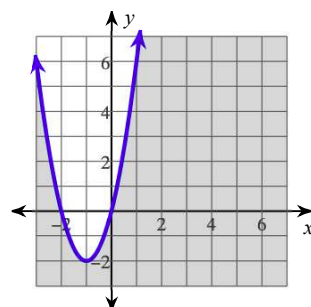
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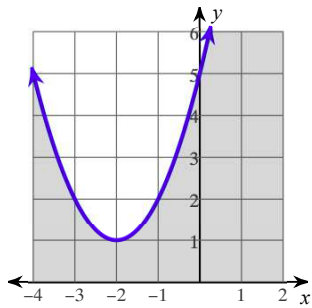
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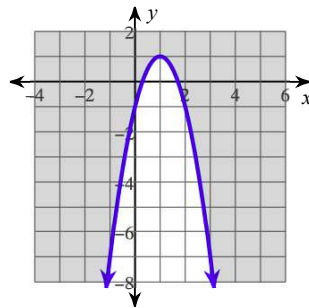
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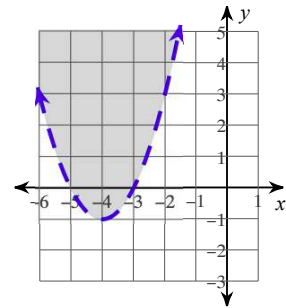
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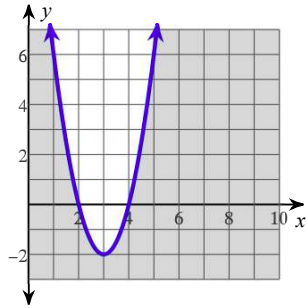
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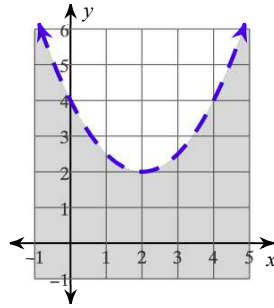
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950) ANSWER KEY IS AT END OF THE SECTION

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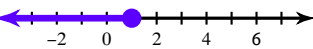
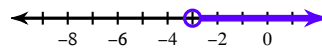
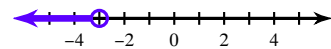
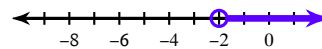
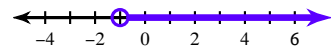
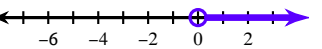
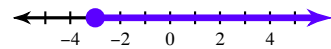
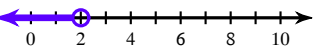
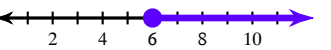
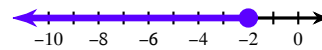
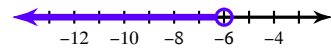
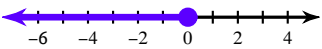
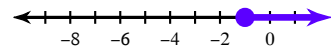
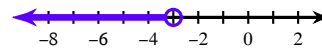
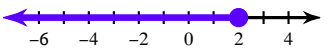
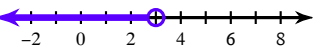
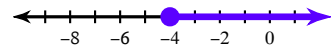
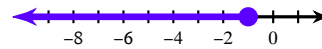
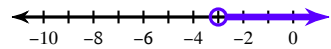
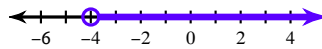
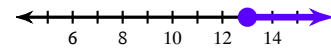
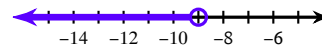
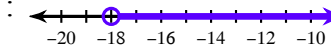
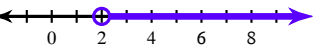
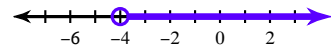
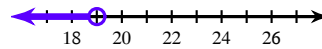
960)

961)

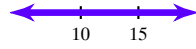
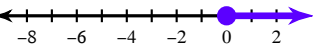
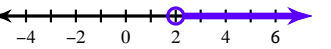
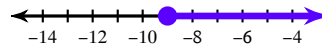
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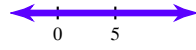
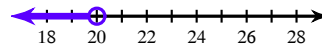
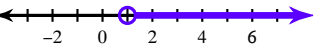
964)

966) $a \leq 1$:967) $k > -3$:968) $a < -3$:969) $x > -2$:970) $x > -1$:971) $r > 0$:972) $n \geq -3$:973) $x < 2$:974) $n \geq 6$:975) $n \leq -2$:976) $x < -6$:977) $m \leq 0$:978) $n \geq -1$:979) $x < -3$:980) $m \leq 2$:981) $b < 3$:982) $x \geq -4$:983) $x \leq -1$:984) $k > -3$:985) $r > -4$:986) $p \geq 13$:987) $b < -9$:988) $b > -18$:989) $x > 2$:990) $a > -4$:991) $x < 19$:

992) { All real numbers. } :

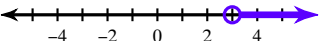
993) $n \geq 0$:994) $k > 2$:995) $v \geq -9$:

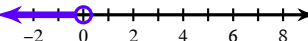
996) { All real numbers. } :

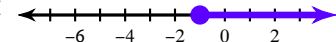
997) $x < 20$:998) $x > 1$:

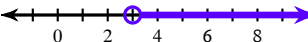
999) { All real numbers. } :

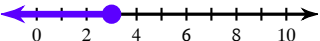


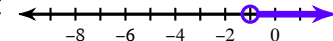
1000) $x > 3$: 

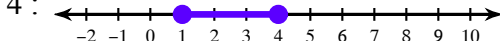
1001) $r < 0$: 

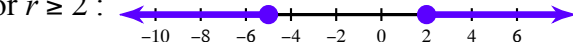
1002) $x \geq -1$: 

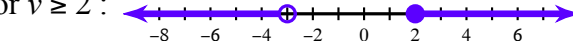
1003) $x > 3$: 

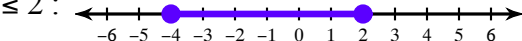
1004) $x \leq 3$: 

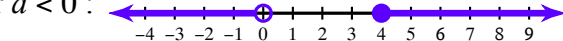
1005) $a > -1$: 

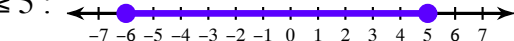
1006) $1 \leq p \leq 4$: 

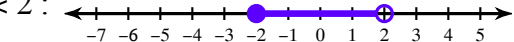
1007) $r \leq -5$ or $r \geq 2$: 

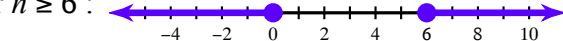
1008) $v < -3$ or $v \geq 2$: 

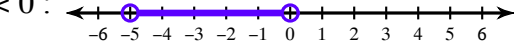
1009) $-4 \leq m \leq 2$: 

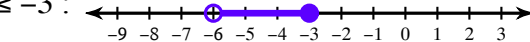
1010) $a \geq 4$ or $a < 0$: 

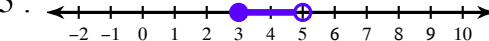
1011) $-6 \leq x \leq 5$: 

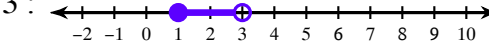
1012) $-2 \leq r < 2$: 

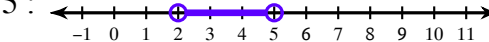
1013) $n \leq 0$ or $n \geq 6$: 

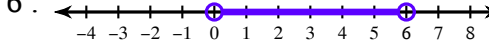
1014) $-5 < v < 0$: 

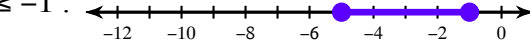
1015) $-6 < x \leq -3$: 

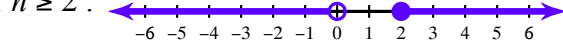
1016) $3 \leq r < 5$: 

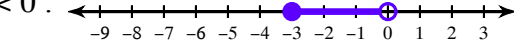
1017) $1 \leq n < 3$: 

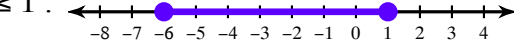
1018) $2 < x < 5$: 

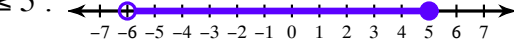
1019) $0 < p < 6$: 

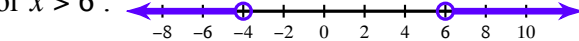
1020) $-5 \leq n \leq -1$: 

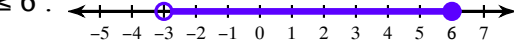
1021) $n < 0$ or $n \geq 2$: 

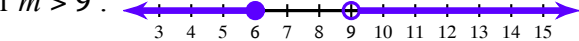
1022) $-3 \leq n < 0$: 

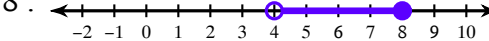
1023) $-6 \leq n \leq 1$: 

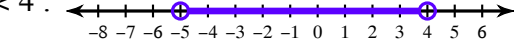
1024) $-6 < n \leq 5$: 

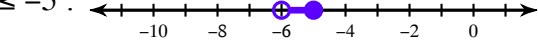
1025) $x < -4$ or $x > 6$: 

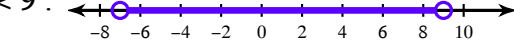
1026) $-3 < b \leq 6$: 

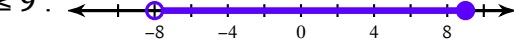
1027) $m \leq 6$ or $m > 9$: 

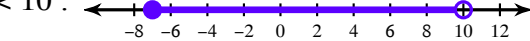
1028) $4 < n \leq 8$: 

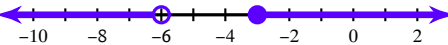
1029) $-5 < v < 4$: 

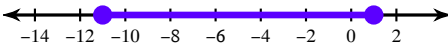
1030) $-6 < p \leq -5$: 

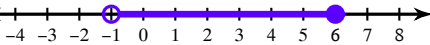
1031) $-7 < a < 9$: 

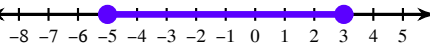
1032) $-8 < x \leq 9$: 

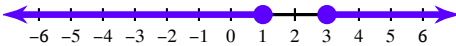
1033) $-7 \leq n < 10$: 

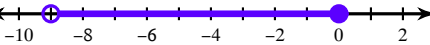
1034) $p < -6$ or $p \geq -3$: 

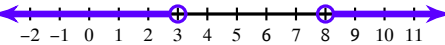
1035) $-11 \leq a \leq 1$: 

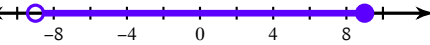
1036) $-1 < r \leq 6$: 

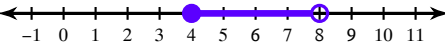
1037) $-5 \leq n \leq 3$: 

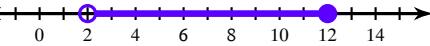
1038) $r \geq 3$ or $r \leq 1$: 

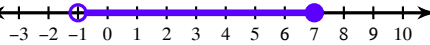
1039) $-9 < n \leq 0$: 

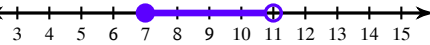
1040) $n < 3$ or $n > 8$: 

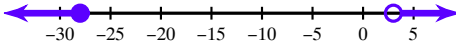
1041) $-9 < k \leq 9$: 

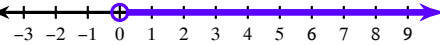
1042) $4 \leq v < 8$: 

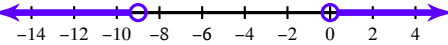
1043) $2 < k \leq 12$: 

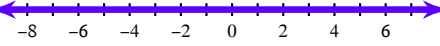
1044) $-1 < b \leq 7$: 

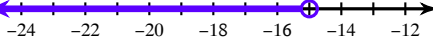
1045) $7 \leq b < 11$: 

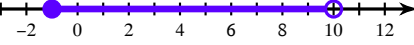
1046) $p > 3$ or $p \leq -28$: 

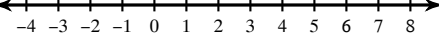
1047) $m > 0$: 

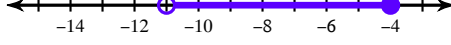
1048) $x < -9$ or $x > 0$: 

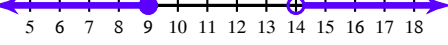
1049) $\{ \text{All real numbers.} \}$: 

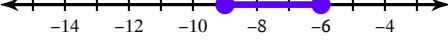
1050) $x < -15$: 

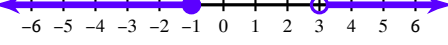
1051) $-1 \leq x < 10$: 

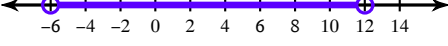
1052) No solution. : 

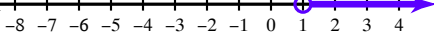
1053) $-11 < p \leq -4$: 

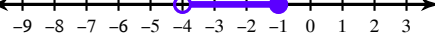
1054) $b > 14$ or $b \leq 9$: 

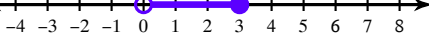
1055) $-9 \leq r \leq -6$: 

1056) $x \leq -1$ or $x > 3$: 

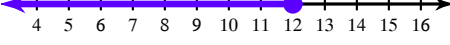
1057) $-6 < k < 12$: 

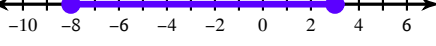
1058) $k > 1$: 

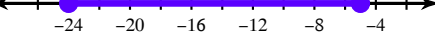
1059) $-4 < p \leq -1$: 

1060) $0 < k \leq 3$: 

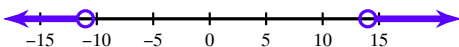
1061) $x \geq 1$ or $x \leq -3$: 

1062) $b \leq 12$: 

1063) $-8 \leq p \leq 3$: 

1064) $-24 \leq p \leq -5$: 

1065) $k > 14$ or $k < -11$:



1066) $[-8, -2]$

1067) $(-\infty, -6] \cup [3, \infty)$

1068) $[-6, -2]$

1069) $\left(\frac{1}{2}, \frac{2}{3}\right)$

1070) $\left[\frac{4}{3}, \frac{3}{2}\right]$

1071) $(-\infty, -8) \cup \left(\frac{5}{2}, \infty\right)$

1072) $(-6, 7)$

1073) $\{-4\}$

1074) $(-6, 5)$

1075) $(1, 2)$

1076) $(-\infty, 5] \cup [7, \infty)$

1077) $\left(-\infty, \frac{3}{2}\right] \cup [2, \infty)$

1078) $(-7, 2)$

1079) $\left[-2, \frac{5}{2}\right]$

1080) $(-3, -2)$

1081) $(-\infty, -1] \cup \left[\frac{5}{2}, \infty\right)$

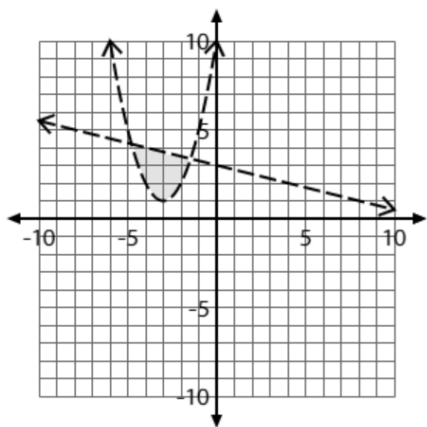
1082) $\emptyset$

1083) $[-7, -2]$

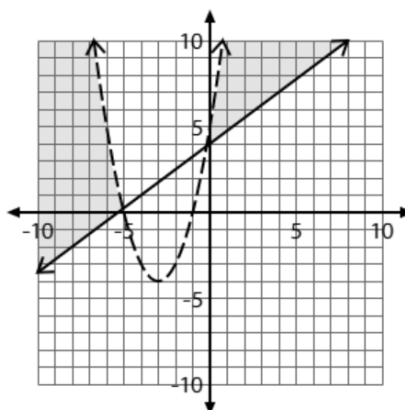
1084) $(-\infty, -3) \cup (3, \infty)$

1085) $\left(-5, \frac{1}{3}\right)$

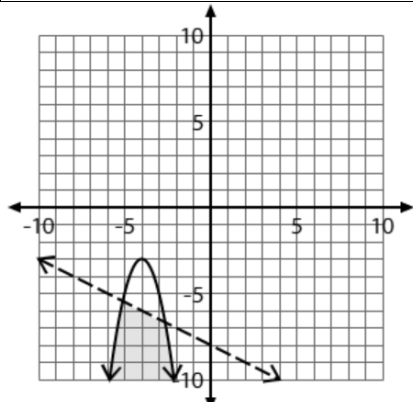
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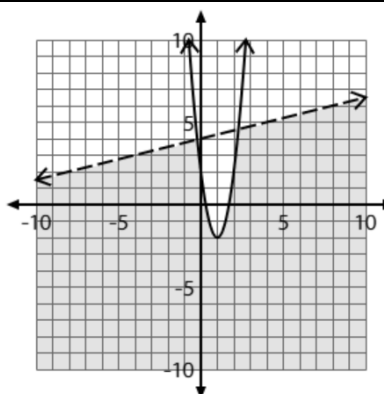
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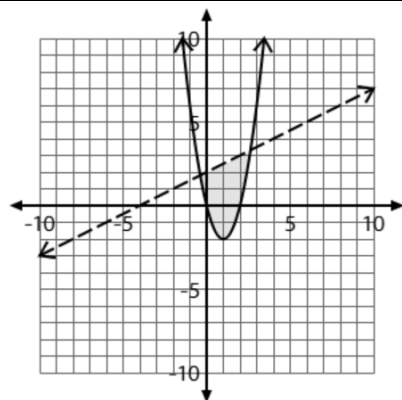
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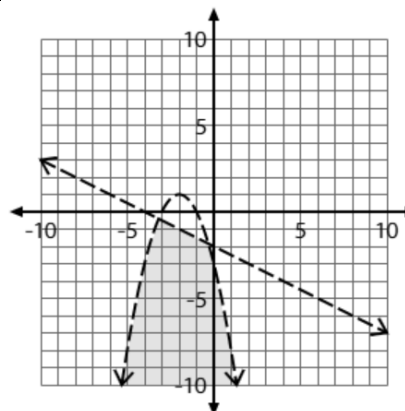
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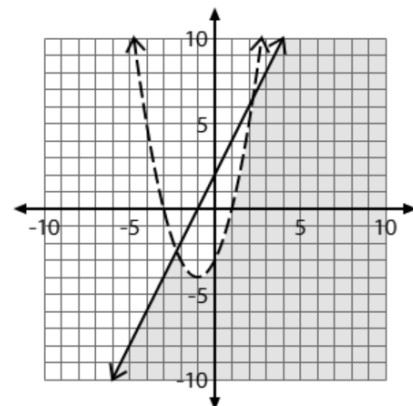
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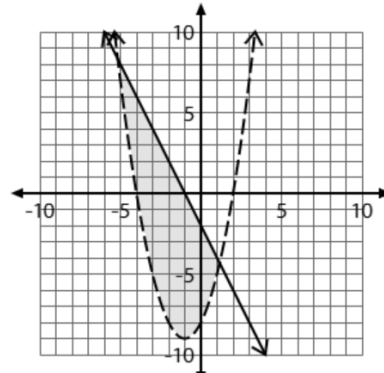
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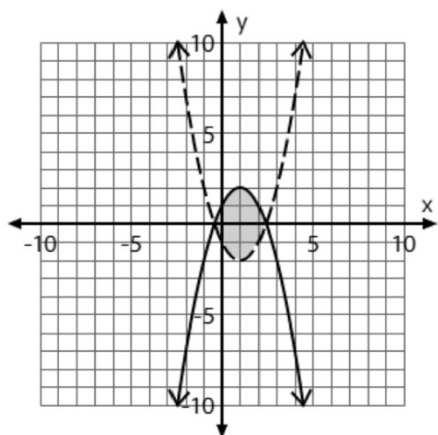
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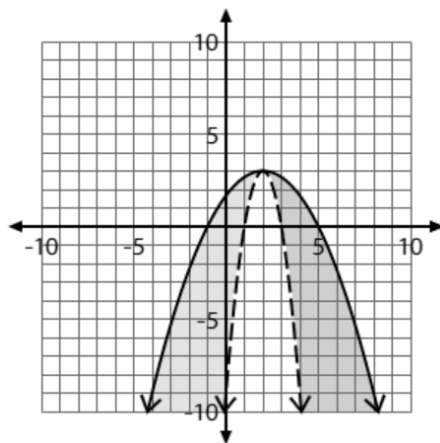
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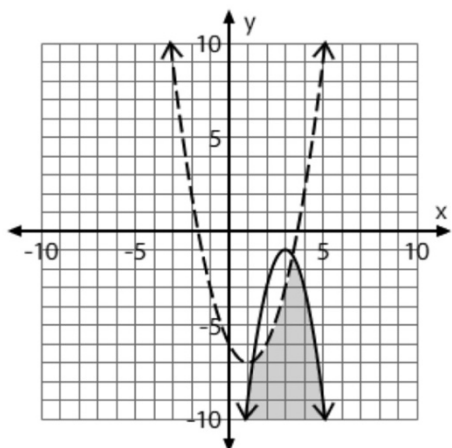
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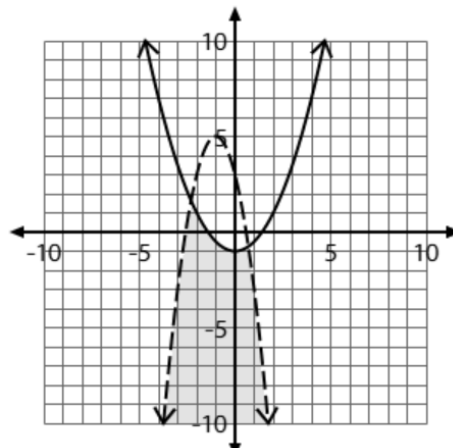
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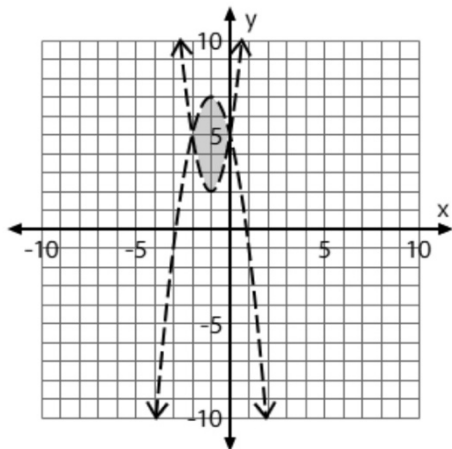
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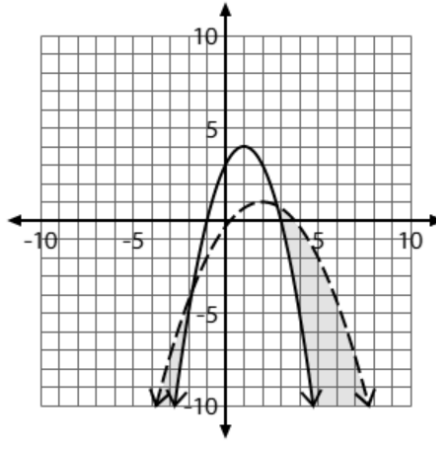
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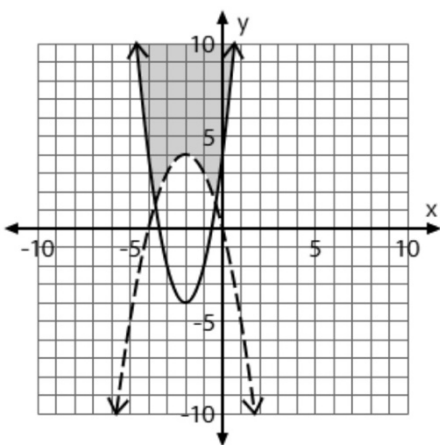
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