

## Lesson 4.2.4



4-99. See below:

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

b.  $y = x + 5$

c.  $x = 1$  or  $x = -5$

d.  $(1, 6)$  and  $(-5, 0)$

e.  $x < -5$  and  $x > 1$

f.  $x = -1$  or  $x = -5$

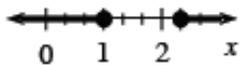
g.  $x = -1$

h. Answers vary. The parabola could be shifted up or flipped over.

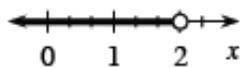
4-100.  $y \leq 3x + 3$ ,  $y \geq 0.5x - 2$ ,  $y \leq -0.75x + 3$

4-101. See below:

a.  $x \leq 1$  or  $x \geq \frac{7}{3}$

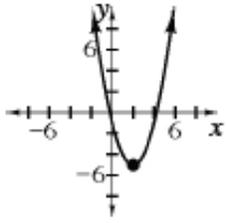


b.  $x < 2$

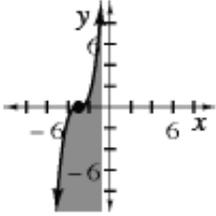


4-102. See below:

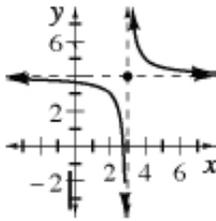
a.



b.



c.



**4-103.**  $60^\circ$

**4-104. See below:**

- a.  $y > 3x - 3$
- b.  $y < 3$
- c.  $y \geq \frac{3}{2}x - 3$
- d.  $y \geq x^2 - 9$

**4-105. See below:**

- a.  $w = 0$  or  $w = -4$
- b.  $w = 0$  or  $w = \frac{2}{5}$
- c.  $w = 0$  or  $w = 6$