



5. (a) $(3, -4)$

(b) $(0, 5)$

(c) $(6, 5)$

6. (a) $(2, 12)$

(b) $(0, 8)$

(c) $(4, 8)$

7. (a) $(-4, 2)$

(b) $(0, 18)$

(c) $(-8, 18)$

8. (a) $(1, 7)$

(b) -2

(c) $(-2, -2)$

9. (a) $(3, 8)$

(b) $(-3, 8)$

(c) $y = 8 - (x + 5)^2$

10. (a) $(4, 2)$

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

11. (a) $(0, 3)$

(b) $y = 7 - (x - 2)^2$

12. (a) 8

(b) $y = (x + 15)^2 - 17,$
 $y = (x + 5)^2 - 17$

Exercise 7.1b page 83

1. (a) $y = 3x^2$

(b) $y = 6x^2$

(c) $y = 4x^2$

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

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

(f) $y = 7x^2$

(g) $y = 8x^2$

(h) $y = -2x^2$

(i) $y = 4x^2$

(j) $y = -3x^2$

(k) $y = \frac{3}{2}x^2$

(l) $y = -\frac{4}{3}x^2$

2. (a) $y = 8x^2 + 3$

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

(c) $y = -2x^2 + 4$

(a) $y = x^2 - 3$

(e) $y = 2x^2 + 5$

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

(g) $y = 5x^2 + 8$

(h) $y = x^2 + 2$

(i) $y = -4x^2 - 50$

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

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

(l) $y = -\frac{4}{3}x^2 + 11$

Exercise 7.2a page 85

1. (a) $(-2, 0), (4, 0)$

(b) $(0, -8)$

(c) $(1, -9)$

2. (a) $(2, 0), (6, 0)$

(b) $(0, 12)$

(c) $(4, -4)$

3. (a) 0 and -6

(b) $(-3, -9)$

4. (a) 4 and -8

(b) $(-2, 36)$

5. (a) 0 and 8

(b) $(4, 16)$

6. (a) $(-5, 0), (-1, 0)$

(b) $(0, 5)$

(c) $(-3, -4)$

7. $(5, -25)$