

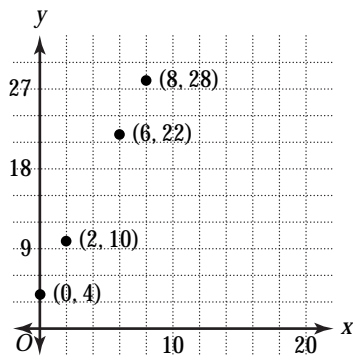
# Answers

## Lesson 1.4

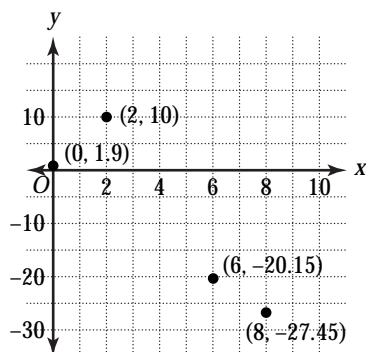
1.  $k = -5; y = -5x$
2.  $k = \frac{7}{3}; y = \frac{7}{3}x$
3.  $k = -\frac{4}{3}; y = -\frac{4}{3}x$
4.  $k = \frac{1}{4}; y = \frac{1}{4}x$
5.  $k = \frac{2}{7}; y = \frac{2}{7}x$
6.  $k = \frac{5}{6}; y = \frac{5}{6}x$
7.  $k = 2; y = 2x$
8.  $k = -3; y = -3x$
9.  $x = 3$
10.  $x = 4$
11.  $y = \frac{9}{2}$
12.  $x = 10$
13.  $z = \frac{5}{2}$
14.  $y = -\frac{5}{4}$
15.  $x = -1$
16.  $z = \frac{1}{3}$
17. yes;  $y = 3x$
18. no; there is no constant,  $k$ , such that  $y = kx$
19. yes;  $y = 2x$

## Lesson 1.5

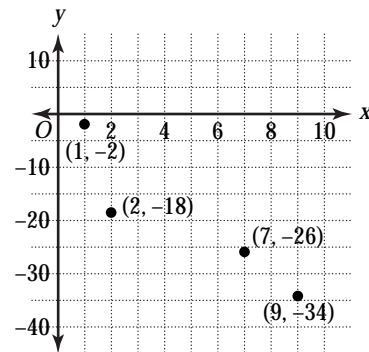
1.  $y = 3x + 4$ ; positive



2.  $y \approx -4.44x + 8.85$ ; negative



3.  $y \approx -3.26x - 4.5$ ; negative



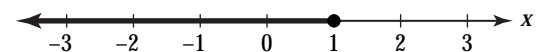
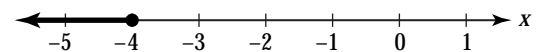
4.  $y = 0.01x + 0.24$
5.  $r \approx 0.96$
6. 0.360

## Lesson 1.6

1.  $x = 2$
2.  $x = 5$
3.  $x = 9$
4.  $x = 6$
5.  $x = 8$
6.  $x = \frac{7}{8}$
7.  $x = -2$
8.  $x = -3$
9.  $x = \frac{1}{2}$
10.  $x = 2$
11.  $x = 16$
12.  $x = -21$
13.  $x = -\frac{1}{3}$
14.  $x = 7$
15.  $x = -\frac{1}{3}$
16.  $x = -\frac{6}{5}$
17.  $x = 18$
18.  $x = -\frac{5}{22}$
19.  $x = -4$
20.  $x = -6$
21.  $x = -\frac{6}{7}$
22.  $x = \frac{1}{2}$
23.  $W = \frac{V}{LD}$
24.  $r = \frac{C}{2\pi}$
25.  $P_1 = \frac{V_2 P_2}{V_1}$
26.  $q_p = \frac{q}{D \times Q}$
27.  $a = \frac{T_0 - T}{z - z_0}$
28.  $h = \frac{A}{a + b}$

## Lesson 1.7

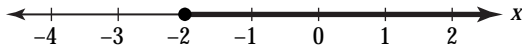
1.  $x \geq -3$
2.  $x > 2$
3.  $x \leq 2$
4.  $x \leq -4$
5.  $x \leq 1$



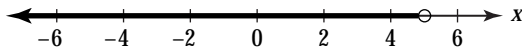
# Answers

6. no solution

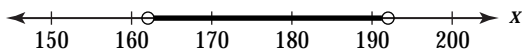
7.  $x \geq -2$



8.  $x < 5$



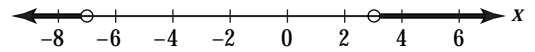
9.  $162 < t < 192$



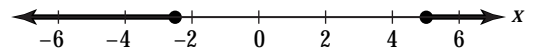
8.  $x < \frac{11}{5}$  and  $x > \frac{1}{5}$



9.  $x < -7$  or  $x > 3$

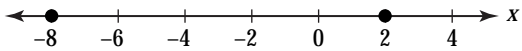


10.  $x \leq -2.5$  or  $x \geq 5$

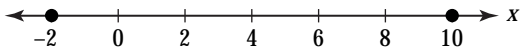


## Lesson 1.8

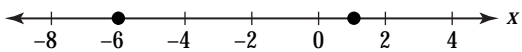
1.  $x = 2$  and  $x = -8$



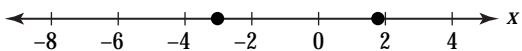
2.  $x = 10$  and  $x = -2$



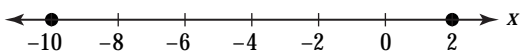
3.  $x = -6$  and  $x = 1$



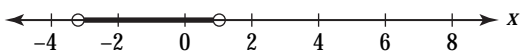
4.  $x = \frac{9}{5}$  and  $x = -3$



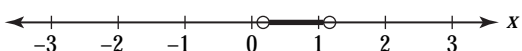
5.  $x = -10$  and  $x = 2$



6.  $x < 1$  and  $x > -\frac{9}{5}$



7.  $x < \frac{7}{6}$  and  $x > \frac{1}{6}$



## Practice — Chapter 2

### Lesson 2.1

1. rational, real
2. irrational, real
3. irrational, real
4. rational, real
5. integer, rational, real
6. rational, real
7. Inverse Property of Addition
8. Identity Property of Multiplication
9. Associative Property of Addition
10. Inverse Property of Multiplication
11. Commutative Property of Multiplication
12. Distributive Property
13. Identity Property of Addition
14. -33    15. 4    16. 43    17. 43    18. 49
19. 28    20. 26    21. 7.2    22. 56    23. 90