Pg 36 #1-9 odd

1. $y = 5.5$
3. $z = \frac{19}{24}$
5. $d = 0.5$
7. infinitely many solutions
9. infinitely many solutions

Pg 458 #1-17 all

1. $(-15)^3$
2. $\left(\frac{1}{12}\right)^5$
3. -8
4. 13
5. 9^{11}
6. 6^{30}
7. $2^7 \cdot 10^7$
8. $(-3.5)^4$
9. 1
10. $\frac{1}{64}$
11. $30{,}000{,}000$
12. 0.00905
13. 1.77×10^8
14. 5.86×10^5
15. 8.37×10^4
16. 8×10^{11}

17. no; $(xy^2)^3 =$

$(xy^2) \cdot (xy^2) \cdot (xy^2) =$

$x \cdot x \cdot x \cdot y^2 \cdot y^2 \cdot y^2 = x^3y^6$

$(xy^3)^2 = (xy^3) \cdot (xy^3) =$

$x \cdot x \cdot y^3 \cdot y^3 = x^2y^6$

Pg 328 #1-15 all

1. -40
2. $\frac{5}{7}$
3. $\frac{10}{3}$ and $-\frac{10}{3}$
4. -3
5. $\frac{2}{5}$
6. $-2\frac{1}{4}$
7. 44
8. $6\frac{1}{2}$
9. -50
10. 54
11. 10 in.
12. irrational
13. integer, rational
14. **a.** 8

    b. 7.6
15. **a.** 9

    b. 9.1

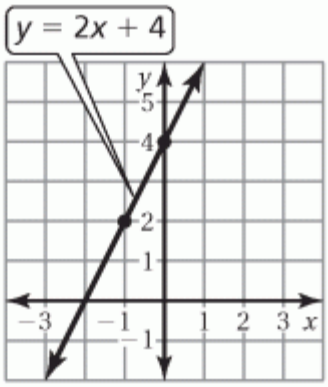
Pg 196 #1-9 odd, 10-14, 17

1. slope: 6; y-intercept: -5

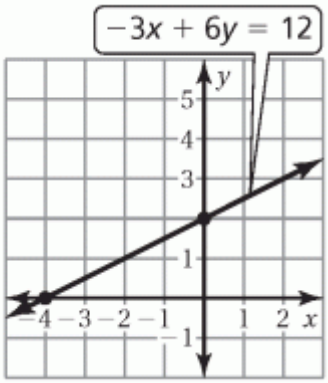
3. slope: -5; y-intercept: -16

5. slope: 0.1; y-intercept: -4.3

7.



9.



10. The red and green lines are parallel. They both have a slope of $\frac{1}{2}$. The black and blue lines are perpendicular. The product of their slopes is -1.

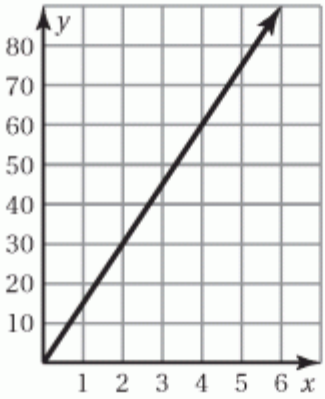
11. 3

12. $y = -\frac{1}{3}x$

13. $y = 2$

14. $y = -2x + 3$

17. a.



You learn 15 new vocabulary words
per week.

b. 75 new vocabulary words

c. 30 more words

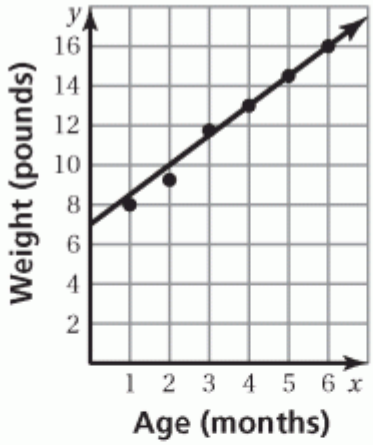
Pg 404 #1-5 all

1. **a.** 1960

   b. about 250 million

   c. There is a positive linear relationship between year and population.

2. **a.**



   b. *Sample answer:* $y = 1.5x + 7$

   c. The slope is 1.5 and the y-intercept is 7. So, the baby is gaining 1.5 pounds per month and was born with a weight of 7 pounds.

   d. 17.5 pounds

3. 48 students like nonfiction;
   22 students dislike nonfiction;
   46 students like fiction;
   24 students dislike fiction.

4. *Sample answer:* histogram; shows frequencies of data values in intervals of the same size

Pg 96 #1-11 all

1. $\angle F$
2. 15 cm
3. dilation
4. reflection
5. translation
6. rotation
7. $A''(5, 2), B''(2, 1), C''(1, 3)$
8. $A''(2, 9), B''(2, 3), C''(8, 3)$
9. no; The lengths of corresponding sides are not proportional.
10. $\frac{7}{4}; \frac{49}{16}$
11. $\frac{3}{4}; \frac{9}{16}$

Pg 1-15 all

1. 133°; $\angle 1$ and the given angle are supplementary.
2. 133°; $\angle 8$ and $\angle 1$ are alternate exterior angles.
3. 133°; $\angle 1$ and $\angle 4$ are vertical angles.
4. 133°; $\angle 4$ and $\angle 5$ are alternate interior angles.
5. 28°, 129°, 23°
6. 68°, 68°, 44°
7. 60°, 60°, 60°
8. 130°
9. The exterior angle can have any measure greater than 15° and less than 180°.
10. 90°, 125°, 100°, 100°, 125°
11. 71°, 111°, 88°, 90°
12. no; The triangles do not have the same angle measures.
13. yes; The two triangles have two pairs of congruent angles.

14. *Sample answer:*

1) The given angle and $\angle 3$ are supplementary, so $\angle 3 = 115°$; $\angle 3$ and $\angle 5$ are alternate interior angles, so $\angle 3 = \angle 5 = 115°$.

2) The given angle and $\angle 8$ are alternate exterior angles, so $\angle 8 = 65°$; $\angle 5$ and $\angle 8$ are supplementary, so $\angle 5 = 115°$.

15. 60 m