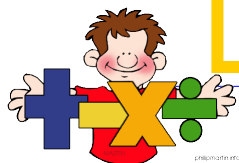


Math Connections



Math Course 2—Week 5 Answers

Comparing Quantities (On An Expression Mat) 6.1.1 - 6.1.2 Answers

Answers (Answers to problems 7 through 12 may vary.)

- | | | |
|-------------------|-------------------------|-------------------------|
| 1. A is greater | 2. B is greater | 3. not possible to tell |
| 4. B is greater | 5. not possible to tell | 6. A is greater |
| 7. A: x ; B: 3 | 8. A: $3x$; B: 1 | 9. A: 1; B: x |
| 10. A: x ; B: 3 | 11. A: $2x$; B: -2 | 12. A: $3x$; B: -6 |

Graphing And Solving Inequalities 6.1.3 - 6.1.4 Answers

Answers

- | | | | | |
|----------------|---------------|----------------|----------------|------------|
| 1. $x > -4$ | 2. $y \leq 8$ | 3. $x \geq 2$ | 4. $m \geq -4$ | 5. $y < 5$ |
| 6. $m \geq -3$ | 7. $x < 3$ | 8. $m \geq -5$ | 9. $m \leq 3$ | |

Solving Equations In Context 6.2.1 - 6.2.7 Answers

Answers

1. $2x + 3 = 25; x = 11$

2. $2x + 4 = x + 16; x = 12$

3. $3x + 7 = 25; x = 6$

4. $4n + 12 = 2n + 28; n = 8$

5. $122 + x = 180; x = 58^\circ$

6. $2x + 40 = 180; x = 70^\circ$

7. $x = -16$

8. $y = -1$

9. $y = -8$

10. $m = -12$

11. $x = 3$

12. $x = 4$

13. $m = 2$

14. $x = 7$

15. $y = -6$

16. $k = -2$

17. $x = 9$

18. $m = 2$

19. $y = -9$

20. $c = 12.5$

Distance, Rate, And Time 7.1.1 Answers

Answers

1. 2.5 hr 2. 234.5 mi 3. 65 mph 4. 105 miles 5. 10.5 mph

6. 4 min 7. B 8. A 9. A

Graphical Representations of Data 7.1 Answers

Answers

1.

$$\begin{array}{r|l} 1 & 8 \\ 2 & 689 \\ 3 & 0344 \end{array}$$

2.

$$\begin{array}{r|l} 1 & 9 \\ 2 & 557 \\ 3 & 0145 \\ 4 & 2 \end{array}$$

3.

$$\begin{array}{r|l} 6 & 7 \\ 7 & 699 \\ 8 & 0124999 \\ 9 & 25 \\ 10 & \\ 11 & \\ 12 & 3 \end{array}$$

4.

$$\begin{array}{r|l} 9 & 1 \\ 10 & 011345789 \\ 11 & 13368 \end{array}$$

Scaling to solve Percent And Other Problems 7.1.2 - 7.1.3 Answers

Answers

- | | | | |
|------------|--------------|-------------------------|--------------------|
| 1. 16 cm | 2. 27 inches | 3. $18\frac{3}{4}$ feet | 4. \$13.00 |
| 5. 80 | 6. 105 | 7. $66\frac{2}{3}$ | 8. $-2\frac{1}{4}$ |
| 9. \$47.40 | 10. \$31.86 | 11. \$31.60 | 12. \$157,500 |

Equations With Fractional Coefficients Answers

Answers

- | | | | |
|------------------------|------------------------|-------------------------|-------------------------|
| 1. $x = 80$ | 2. $x = 105$ | 3. $y = 66\frac{2}{3}$ | 4. $m = -\frac{9}{4}$ |
| 5. $y = 3$ | 6. $x = 22.5$ | 7. $y = -17\frac{1}{2}$ | 8. $m = -3$ |
| 9. $x = -\frac{10}{9}$ | 10. $x = \frac{36}{7}$ | 11. $x = \frac{48}{7}$ | 12. $x = \frac{65}{11}$ |

Percent Increase Or Decrease 7.1.7 Answers

Answers

- | | | | |
|----------|-----------|-----------|-----------------|
| 1. 400% | 2. 125% | 3. 5300% | 4. 7,228,202.4% |
| 5. 91.2% | 6. 69.01% | 7. 95.12% | 8. \$55 |
| 9. 91.7% | 10. 60.1% | | |

Percent Increase Or Decrease 7.1.8 Answers

Answers

- $I = 50(0.05)1 = \$2.50$; Jody paid back \$52.50.
- $I = 2000(0.075)4 = \$600$
- $I = \$500(0.0875)5 = \218.75
- $\$1012.50 = x(0.045)15$; $x = \$1500$
- $I = 125(0.035)1 = \$4.38$