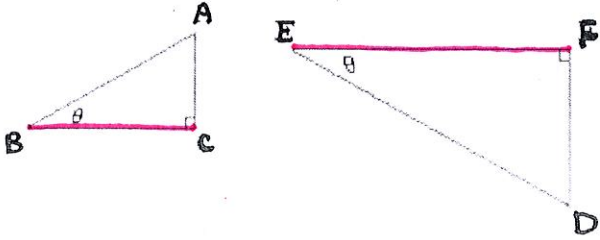
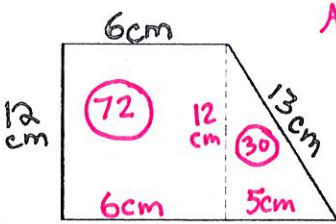
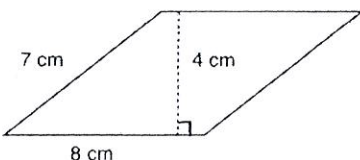
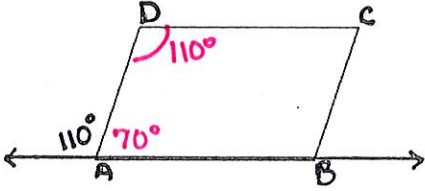
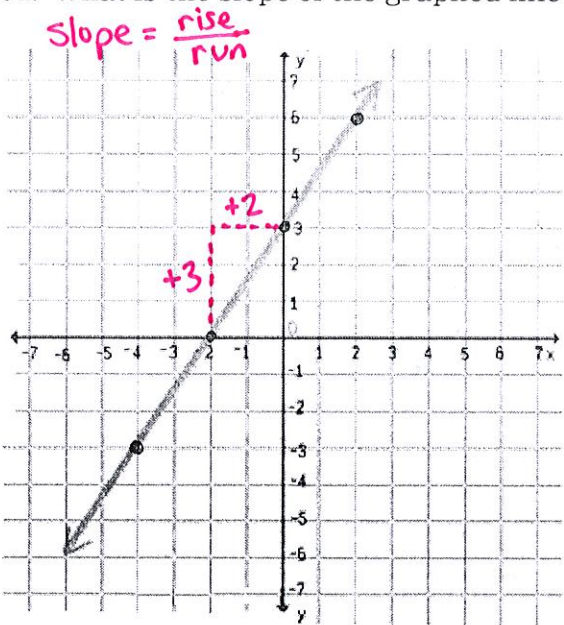


Lesson	Problem	Answer
Lesson 48: Percent of a whole	1. A pitcher threw 60 total pitches, 39 of which were strikes. What percent of the pitches were strikes? $\frac{39}{60} = \frac{x}{100}$	1.  65%
Lesson 7: Rates and Averages	2. The trip from Denver to San Francisco is about 1528 kilometers. At 95 km per hour, the trip would take about how many hours? $95 \cdot t = 1528$	2.  16 hours
Lesson 48, 58: Percent of a Whole; Solving Percent Problems with Equations	3. How much is a 15% down payment on a car that costs \$32,900? $\begin{array}{r} 32900 \\ \times 0.15 \\ \hline \end{array}$	3.  \$4,935
Investigation 5: Graphing Transformations	4. The vertices of $\triangle ABC$ are at $A(-4, -2)$ , $B(-1, -3)$ and $C(-3, -5)$ . If $\triangle ABC$ is reflected in the $y$ -axis, then what are the coordinates of $B'$ ?  * use graph paper!	4.  $B'(1, -3)$
Lesson 34, 45: Proportions, Ratio Word Problems, Ratio Problems involving Totals	5. The team lost 8 of its 30 games. What is the team's <u>win-loss</u> ratio?  lost 8 won 22 $\frac{22}{8} = \frac{11}{4}$	5.  $\frac{11}{4}$
Lesson 32: Probability	6. Michelle draws one marble from a bag containing 6 red, 4 blue, and 2 green marbles. What is the probability that she draws a blue marble? $\frac{\text{blue}}{\text{total}} = \frac{4}{12} = \frac{1}{3}$	6.  $\frac{1}{3}$
Lesson 42: Volume	7. What is the volume of a fish tank that is 22 inches long, 18 inches high, and 10 inches deep? $V = l \cdot w \cdot h$ $V = (22)(18)(10)$	7.  $3,960 \text{ in}^3$

<p>Lesson 43: Surface Area</p>	<p>8. A gallon of paint covers 400 square feet. How many gallons of paint are needed to paint the <u>outside of a building</u> that is 22 feet high and has a perimeter of 210 feet?  <math display="block">\text{Lateral Surface Area} = (\text{Perimeter of base}) \times (\text{height})</math> <math display="block">= (210)(22) = 4,620 \text{ ft}^2</math> <math display="block">400 \overline{)4620} \begin{array}{r} 11.55 \\ \underline{4400} \\ 220 \\ \underline{220} \\ 0 \end{array}</math> <math display="block">11.55 \text{ gallons} \rightarrow 12</math></p>	<p>8. 12 gallons of paint</p>
<p>Lesson 49: Solving Rate Problems with Proportions and Equations</p>	<p>9. With a full 16-gallon tank, Matthew's truck can travel 480 miles. At that rate, how far can Matthew travel on 9 gallons of fuel?  <math display="block">\frac{480 \text{ miles}}{16 \text{ gal.}} = \frac{x}{9 \text{ gal.}}</math></p>	<p>9. 270 miles</p>
<p>Lesson 52: Using Unit Multipliers to Convert Measures</p>	<p>10. Use a unit multiplier to convert 7.5 feet to inches.  <math display="block">7.5 \text{ ft} \times \left( \frac{12 \text{ in.}}{1 \text{ ft}} \right) = 90 \text{ in.}</math></p>	<p>10. 90 inches</p>
<p>Lesson 35: Similar and Congruent Polygons</p>	<p>11. The two triangles are similar. Which side corresponds to side BC?  </p>	<p>11. side EF</p>
<p>Inv. 2 and Lesson 37: Pythagorean Theorem and Areas of Combined Polygons</p>	<p>12. What is the area of the figure?    <math display="block">A = \frac{1}{2} b \cdot h</math> <math display="block">\frac{12}{x} \times 6 = 72 \text{ cm}^2</math> <math display="block">12^2 + x^2 = 13^2</math> <math display="block">144 + x^2 = 169 \rightarrow x^2 = 25 \quad x = 5</math> <math display="block">\frac{12}{5} \times 5 = 60</math> <math display="block">\frac{60}{2} = 30</math> <math display="block">30 + 72 = 102</math></p>	<p>12. 102 cm<sup>2</sup></p>
<p>Lesson 6 and 39: Converting Measures and Circumference of a Circle</p>	<p>13. The diameter of a face-off circle in an ice hockey rink is 30 feet. About how many inches is the <u>distance around the face-off circle</u>?  <math display="block">C = \pi \cdot d</math> <math display="block">C = (3.14)(30)</math> <math display="block">C = 94.2 \text{ ft.}</math> <math display="block">94.2 \text{ ft.} \left( \frac{12 \text{ in.}}{1 \text{ ft.}} \right) = 1130.4 \text{ in.}</math></p>	<p>13. 1130 in.</p>



<p>Lesson 40: Area of a Circle</p>	<p>14. What is the approximate area of a circle with a diameter of 17 inches?</p> $A = \pi \cdot r^2$ $A = (3.14) \cdot (8.5)^2$ $A \approx (3.14) \cdot (72)$ $A \approx 226 \text{ in}^2$	<p>14.</p> $226 \text{ in}^2$
<p>Lesson 44: Solving Proportions using Cross Products</p>	<p>15. Solve for y.</p> $\frac{14}{6} = \frac{y}{1.8}$	<p>15.</p> $y = 4.2$
<p>Lesson 50: Solving Multi-Step Equations</p>	<p>16. Solve the equation.</p> $7x - 2x - 6 = 9$ $5x - 6 = 9$ $5x = 15$	<p>16.</p> $x = 3$
<p>Lesson 46: Solving Problems using Scientific Notation</p>	<p>17. Simplify.</p> $\frac{4.8 \times 10^6}{3} \times 10^5$ $1.6 \times 10^6 \times 10^5$	<p>17.</p> $1.6 \times 10^{11}$
<p>Lesson 57: Operations with Small Numbers in Scientific Notation</p>	<p>18. Simplify.</p> $(3 \times 10^{-4}) \times (1.9 \times 10^{-8})$	<p>18.</p> $5.7 \times 10^{-12}$
<p>Lesson 33 and 36: Subtracting, Multiplying, and Dividing Integers</p>	<p>19. Simplify.</p> $\frac{(-7) + 4 - (-6)}{(-1)(3)}$ $\frac{-7 + 4 + 6}{-3}$ $\frac{-7 + 10}{-3} = \frac{3}{-3}$	<p>19.</p> $-1$
<p>Lesson 31 and 36: Adding Integers, Collecting Like Terms, Multiplying and Dividing Integers and Terms</p>	<p>20. Simplify.</p> $3x + 4(x - 2) + 1$ $3x + 4x - 8 + 1$ $7x + (-8) + 1$	<p>20.</p> $7x - 7$ <p>or</p> $7x + (-7)$

<p>Lesson 60: Area of a Parallelogram</p>	<p>21. What is the area of the parallelogram?</p>  <p><math>A = b \cdot h</math> <math>= 4(8)</math> <math>= 32</math></p>	<p>21. <math>32 \text{ cm}^2</math></p>
<p>Lesson 59: Experimental Probability</p>	<p>22. A spinner was divided into 4 sectors of different sizes, labeled W, X, Y, Z. Anthony spun the spinner a number of times and recorded the following results:</p> <p>W: 14 times, X: 7 times, Y: 9 times, <u>Z: 18 times</u></p> <p>Based on these results, what is the probability that the spinner will stop in sector Z on the next spin? <math>14 + 7 + 9 + 18 = 48</math> <math>\frac{18}{48} = \frac{3}{8}</math></p>	<p>22. <math>\frac{3}{8}</math></p>
<p>Inv. 3 and Lesson 54: Classifying Quadrilaterals and Angle Relationships</p>	<p>23. Figure ABCD is a parallelogram. What is the measure of <math>\angle D</math>?</p> 	<p>23. <math>\angle D: 110^\circ</math></p>
<p>Lesson 44 and 56: Slope of a Line and Slope-Intercept Equation of a Line</p>	<p>24. What is the slope of the graphed line?</p>  <p><math>\text{slope} = \frac{\text{rise}}{\text{run}}</math></p>	<p>24. <math>\frac{3}{2}</math></p>
<p>Lesson 56: Slope-Intercept Equation of a Line</p>	<p>25. What is the y-intercept of the graphed line in problem #24?</p>	<p>25. <math>(0, 3)</math></p>