

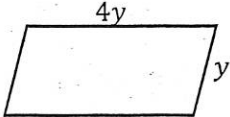
RATIOS AND PROPORTIONAL RELATIONSHIPS

Skill Practice and Problem Solving

<p>1. At 3:30 p.m., you have 15 megabytes of a movie. At 3:45 p.m., you have 75 megabytes. What is the download rate in megabytes per minute?</p>	<p>2. Mya makes 83% of her shots, Justin makes $\frac{17}{20}$ of his shots and Shala makes 0.8 of her shots. Who made the most shots?</p>
<p>3. You estimate that a kitten weighs 15 pounds. The actual weight of the kitten is 8 pounds. Find the percent error.</p>	<p>4. Nora can do 70 push-ups in 2 minutes. Luke can do 105 push-ups in 3 minutes. Do these rates from a proportion? Explain.</p>
<p>5. Of 220 seventh-grade students, 25% earn the Community Service Award. How many students earn the award?</p>	<p>6. A store pays \$35 for a fish tank. The markup is 20%. What is the selling price?</p>
<p>7. Five concert tickets cost \$181.25. What is the cost of 8 concert tickets?</p>	<p>8. You borrow \$500 to buy a computer. The simple interest rate is 15%. You pay off the loan after 4 years. How much do you pay for the loan?</p>

EXPRESSIONS AND EQUATIONS

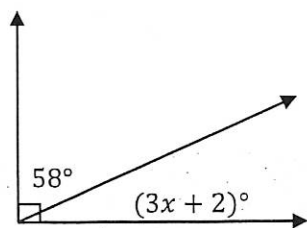
Skill Practice and Problem Solving

<p>1. Find the sum.</p> $\frac{1}{4}(12 + x) + \frac{1}{2}(x - 6)$	<p>2. You withdrew \$36.25 from your checking account. Now your balance is -\$14.75. Write and solve an equation to find the amount of money in your account before you withdrew the money?</p>
<p>3. David's cell phone company charges \$0.45 for each text message plus a monthly fee of \$50.00. He owes \$91.40. Write and solve an equation to find the number of text messages did David has?</p>	<p>4. A theater charges \$5.25 per ticket. The theater has already sold 40 tickets. Write and solve an inequality that represents how many more tickets the theater needs to sell to earn at least \$400.</p>
<p>5. The perimeter of the parallelogram is 25 feet. Find y.</p> 	<p>6. Factor the expression using the GCF.</p> $75m + 85$
<p>7. You have \$7.60 to buy cantaloupes for a fruit salad recipe. Cantaloupes cost \$1.90 each. Write and solve an inequality that represents the number of avocados you can buy.</p>	<p>8. A pair of football cleats cost \$42.00. Samantha make \$1.75 every time she washes the dishes. Write and solve an equation do find how many times Samantha will have to wash the dishes to buy the football cleats?</p>

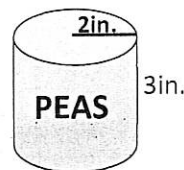
GEOMETRY

Skill Practice and Problem Solving

1. Tell whether the angles are adjacent or vertical. Then find the value of x .

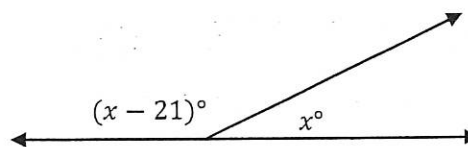


2. How much paper is used for the label on the can of peas? Round your answer to the nearest tenth of a square inch.

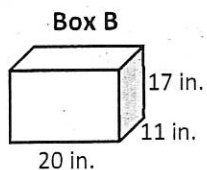
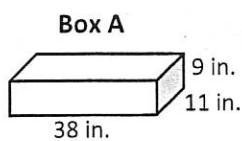


3. A snake at the zoo is 4 feet long. A scale model of the snake is 2 inches long. What is the scale factor?

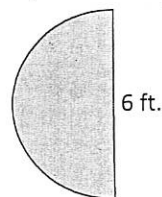
4. Tell whether the angles are complementary or supplementary. Then find the value of x .



5. Each storage box is shaped like a rectangular prism. Which has more storage space? Explain.

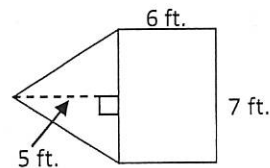


6. Find the perimeter of the semicircular region. Round your answer to the nearest hundredth?



7. The diameter of a circular plate is 12 inches. What is the area of the plate? Round your answer to the nearest tenth of a square inch.

8. Eleanor paints this figure on her wall. Find the area of the figure.



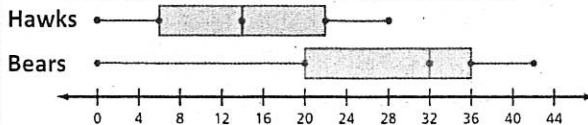
STATISTICS AND PROBABILITY

Skill Practice and Problem Solving

1. The probability that you randomly select a red marble from a group of 40 marbles is $\frac{7}{20}$. How many are red marbles?

2. Jordan wants to estimate the number of students in his school who have their own cell phone. He surveys every eighth person who enters the cafeteria for lunch. Is this sample biased or unbiased. Explain.

3. The double box-and-whisker plot shows the points scored per game for two soccer teams during the season. Compare the populations using measures of center and variation.



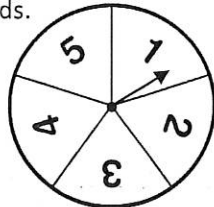
4. Lenny asked 125 randomly chosen seventh grade students at his school to name their favorite beverage. There are 1500 seventh grade students in the school. Predict the number of seventh grade students in his school whose favorite beverage is milk.

Favorite Beverage			
Milk	Apple Juice	Tea	Water
58	14	17	36

5. How many different outfits can you make from 7 T-shirts, 4 pairs of jeans, and 3 pairs of shoes?

6. Your basketball team has a 75% chance of winning the next game. Describe the likelihood of your team winning the next game.

7. Gary spins the spinner and flips a coin. Find the probability of Gary spinning an even number and flipping heads.



8. You randomly choose a letter from a hat with the letters A through J. Without replacing the first letter, you choose a second letter. Find the probability of choosing a vowel and then a D.