

Sample Lesson #2

1. Expand this expression by using the distributive property: $-4(3b + 7)$. Evaluate the expression when $b = 3$.
2. When a new quarterback entered the game, the team was on the 20-yard line. On the next play, the team lost 12 yards. Write and solve an equation to describe the team's final position.
3. People in 3 sample groups within a town were asked to name their favorite ice cream flavor. Study the results from sample groups A, B, and C. What generalization can be made?

Sample Group	Vanilla	Chocolate	Strawberry	Total
A	40	35	25	100
B	31	45	24	100
C	27	48	25	100

4. Savannah makes and sells holiday wreaths. The cost of supplies is \$7.00 per wreath, so Savannah charges that plus a 40% markup. What is the cost of each wreath?
5. Use a protractor to draw a triangle with angles measuring 40° , 110° , and 30° . See the *Help Pages* for drawing angles with a protractor.
6. Simplify this complex fraction. $\frac{1\frac{2}{3}}{2\frac{1}{9}}$
7. A coin is tossed. What is the probability of it landing on tails? Express the probability as a fraction.
8. In a video game, Gavin lost 10 coins at each level for 7 levels. Describe the total change in coins after 7 levels.
9. Three sisters raised money for a charity. Samantha raised $\frac{3}{8}$ of the goal amount, and Angelica raised 38.5% of the goal. Renata raised 0.24 of the goal. Which sister raised the most?
10. Find the area of a circle that has a radius of $\frac{7}{10}$ cm. Use $\frac{22}{7}$ for pi.
11. Divide. Write the quotient in simplest form. $-2\frac{2}{3} \div 2\frac{2}{9} = ?$
12. Sam is putting up wallpaper on several walls in his house. He charts their lengths and the area of wallpaper he will need for each of them. Are the data proportional?

<p>1.</p> <p>7.EE.1</p>	<p>2.</p> <p>7.NS.1</p>										
<p>3.</p> <p>7.SP.2</p> <p>A) Vanilla is always the most popular flavor.</p> <p>B) Overall, chocolate and vanilla are more popular than strawberry.</p> <p>C) Chocolate is always the most popular flavor.</p>	<p>4.</p> <p>7.RP.3</p>										
<p>5.</p> <p>7.G.2</p>	<p>6.</p> <p>7.RP.1</p>										
<p>7.</p> <p>7.SP.5</p>	<p>8.</p> <p>7.NS.3</p>										
<p>9.</p> <p>7.EE.3</p>	<p>10.</p> <p>7.G.4</p>										
<p>11.</p> <p>7.NS.2</p>	<p>12.</p> <p>7.RP.2</p> <table border="1" data-bbox="873 1753 1179 1950"> <thead> <tr> <th>Length (ft)</th> <th>Area (ft²)</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>27</td> </tr> <tr> <td>4</td> <td>36</td> </tr> <tr> <td>9</td> <td>81</td> </tr> <tr> <td>13</td> <td>117</td> </tr> </tbody> </table>	Length (ft)	Area (ft ²)	3	27	4	36	9	81	13	117
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