

# Solving Problems using Proportional Reasoning

Name \_\_\_\_\_  
Date \_\_\_\_\_

**KEY**

For each problem, set up a proportion. Include the units for each ratio. Then solve for the missing value and label your answer with appropriate units. Round answers to the nearest tenth.

<p>1. Sam raked 3 bags of leaves in 16 minutes. If he continues to work at the same rate, about how long will it take him to rake 5 bags?</p>	<p>Proportion with Units</p> $\frac{3 \text{ bags}}{16 \text{ min}} = \frac{5 \text{ bags}}{x \text{ min}}$	<p>Work + Solution</p> $3x = 5 \cdot 16$ $3x = 80$ $x = 26.7$ <p>26.7 min</p>
<p>2. Amy earned \$25 after babysitting for 3 hours. If she always charges the same rate, how much will she make after working for 7 hours?</p>	<p>Proportion with Units</p> $\frac{25}{3} = \frac{x}{7}$	<p>Work + Solution</p> <p>\$58.33</p>
<p>3. A 2-month membership to the gym costs \$125. Jim would like to be a member for 8 months. What is the total amount he will pay for 8 months?</p>	<p>Proportion with Units</p> $\frac{2}{125} = \frac{8}{x}$	<p>Work + Solution</p> <p>\$500</p>
<p>4. Bobby drove 110 miles, and his car used up 5 gallons of gas. How many miles can he drive with 16 gallons of gas?</p>	<p>Proportion with Units</p> $\frac{110}{5} = \frac{x}{16}$	<p>Work + Solution</p> <p>352 miles</p>
<p>5. Mary ran 2 miles in about 23 minutes. If she continued at the same pace, how long will it take her to run 10 miles?</p>	<p>Proportion with Units</p> $\frac{2}{23} = \frac{10}{x}$	<p>Work + Solution</p> <p>115 min</p>