Solving Problems using Proportional Reasoning

Name _____
Date _____

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.

	Proportion with Units	Work + Solution
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?	$\frac{3 \text{ bags}}{16 \text{ min}} = \frac{5 \text{ bags}}{x \text{ min}}$	about 27 min
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?	$\frac{\$25}{3 \text{ hours}} = \frac{x}{7 \text{ hours}}$	about $58
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?	$\frac{2 \text{ month}}{\$125} = \frac{8 \text{ month}}{x}$	$500
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?	$\frac{110 \text{ miles}}{5 \text{ gal}} = \frac{x}{16 \text{ gal}}$	x = 352 miles
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?	$\frac{2 \text{ miles}}{23 \text{ min}} = \frac{10 \text{ miles}}{x}$	x = 115 minutes