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.

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?
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?
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?

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?

| Proportion with Units | Work + Solution |
| :---: | :---: |
| $=$ |  |
|  |  |

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?



Work + Solution

Write and solve a proportion.

Example 1: To make 24 cookies you need to use 9 ounces of flour. Write and solve a proportion to figure out how many cookies you can make if you only have 5 ounces of flour.


Created by Edwin PM
from Noun Project

Ex 1 Continued: Your sister comes home with 124 ounces of flour. How many cookies can you make with 124 ounces of flour?


Example 2: An architect builds a scale model of CHS. The school is 45 feet high. The ratio of the model to the actual school is 1 foot to 60 feet. Find the height of the model.

Suppose the ratio of the model to the actual school is 1 foot to 100 feet. Find the height of the model.

We will make a review flipbook, use the problems below to create your unit 2 resource. Check your solutions!

## TYPICAL EQUATIONS

Choose at least 6 problems from below. Solve each equation, then check your solution.

1) $4-3(5 n-6)=97$
2) $1+3 v+5 v=17$
3) $7(7-4 n)=22-n$
4) $5(7 n+4)=5(8+7 n)$
5) $2(r-5)=2 r-2(1-4 r)$
6) $8+\frac{x}{4}=6$
7) $\frac{r}{3}+1=-5$
8) $\frac{6+n}{9}=-1$
9) $1=\frac{5+x}{10}$

## PROPORTIONS

Solve each proportion. Check your solution.
10) $\frac{9}{k}=\frac{4}{10}$
11) $\frac{9}{3}=\frac{n}{4}$
12) $\frac{n-5}{n}=\frac{6}{10}$
13) $\frac{n-2}{9}=\frac{n-6}{8}$

