

# MasterMath

Name \_\_\_\_\_

## Ratios and Rates

Date \_\_\_\_\_

1. The corporate team-building event will cost \$8 if it has 4 attendees. If there are 7 attendees, how much will the corporate team-building event cost? Assume the relationship is directly proportional.

14

2. Randy prepared 6 kilograms of dough after working 2 hours. How much dough did Randy prepare if he worked for 6 hours? Assume the relationship is directly proportional.

18

3. Ronice's office recycled a total of 12 kilograms of paper over 3 weeks. How many weeks will it take Ronice's office to recycle a total of 20 kilograms of paper? Assume the relationship is directly proportional.

5

4. On a public transportation map, two stations are 4 inches apart, whereas in real life the distance between them is 2 miles. What scale does the map use?

1" : .5 miles  
or  
2" : 1 mile

5. Amelia learns 2 new appetizer recipes during each week of culinary school. After 5 weeks of culinary school, how many total appetizer recipes will Amelia know? Write and solve an equation to find the answer.

Equation	Answer
$2/1 = x/5$	10

6. In geometry class, the girl to boy ratio is 7 to 8. If there are a total of 60 students, how many boys are there? First write a proportional relationship, then solve.

boys	8	=	x
students	15		60

32 boys

7. Solve for x:

$$\frac{6}{7} = \frac{9}{x + 2}$$

x = 8.5

8. This HO Scale locomotive model measures 3.25" long. HO Scale is 1:87. How many feet long is the actual locomotive?



23.56'