#### MOMENTUM MATH LEVEL H



### **Unit 2 - Ratios and Proportions** What do ratios represent? How are ratios used to describe the relative sizes of two quantities? *How are the numbers in a proportion related?* How can you use cross-products to find a missing number in a proportion? How can you use a proportion to solve a percent problem? How can you use parts of a whole to describe how likely an event is? What is a rate? How can you use proportions to solve rate problems? What is speed? What strategies can you use to solve multistep rate problems?

### **WRITING RATIOS**

# A

## **Today's Destination**What do ratios represent?



#### Vocabulary —

**Ratio** A comparison of two quantities a and b, expressed as a:b or as  $\frac{a}{b}$ 

| Fraction Form | Colon Form | Word Form |
|---------------|------------|-----------|
| <u>3</u>      | 3:4        | 3 to 4    |



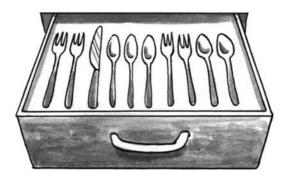
### Problem of the Day —



Who received a higher score—Marta or Matt?

## IN THE DRIVER'S SEAT

Use the picture below to write the probability of each event as a fraction and as a percent.



1) If you pick a piece of silverware at random, what is the probability of picking a fork?

Write It! = %

2) If you pick a piece of silverware at random, what is the probability of NOT picking a fork?

Write:It! \_\_\_\_\_ = \_\_\_\_\_%

3) If you pick a piece of silverware at random, what is the probability of picking a spoon?

Write It! = %

4) If you pick a piece of silverware at random, what is the probability of NOT picking a spoon?

WriteIt! \_\_\_\_ = \_\_\_ %

5) If you pick a piece of silverware at random, what is the probability of picking a knife?

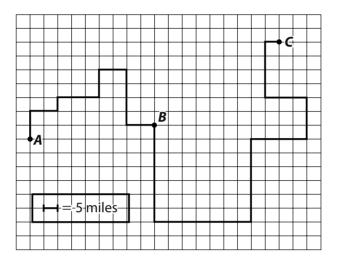
Write It! = \_\_\_\_\_\_ %

6) If you pick a piece of silverware at random, what is the probability of NOT picking a knife?

Write:It! = \_\_\_\_\_\_ = \_\_\_\_\_%

## **SIDE TRIPS**

1) Ms. West drove from Point A to Point B, as shown on the map below, at an average speed of 45 miles per hour. Without stopping, Ms. West then drove from Point B to Point C at an average speed of 50 miles per hour. How long did it take Ms. West to drive from Point A to Point C?





| Write It!     | It took Ms. West hours to drive from Point A to Point C. |
|---------------|--|
| Explain all o | of the steps you took to solve this problem.             |
| Explain It!   |  |
|               |  |
|               |  |