

Student Activity Book

**Using Ratio in Measurement (SAB pp. 213–216)
Questions 1–5**

1.

Measuring in Feet and Inches


| | Item Measured | Inches | Feet |
|-----|-----------------------|-----------|----------------------|
| | Length of a math book | 12 inches | 1 foot |
| A. | Height of a shelf | 24 inches | 2 feet |
| B.* | Length of a table | 72 inches | 6 feet |
| C. | Width of a table | 36 inches | 3 feet |
| D.* | Width of the door | 30 inches | 2 $\frac{1}{2}$ feet |
| E. | Height of the door | 84 inches | 7 feet |

2. A.* 48 inches
 B. 5 feet
 C. I know that 5×12 inches = 60 inches, so I multiplied $1 \text{ foot} \times 5 = 5$ feet to find the missing value.

Name _____ Date _____

Using Ratios in Measurement

1. Lee Yah and Peter are measuring items in their classroom. Lee Yah wanted to give the length of each item in inches and Peter wanted to give the length in feet.



We have to measure each item only one time. Since I know there are 12 inches in 1 foot, we can figure out the missing measurements.

Lee Yah

Peter and Lee Yah recorded their measurements in a table. Use what you know about the relationship between inches and feet to fill in the missing measurements.

Measuring in Feet and Inches

| | Item Measured | Inches | Feet |
|----|-----------------------|-----------|--------|
| | Length of a math book | 12 inches | 1 foot |
| A. | Height of a shelf | | 2 feet |
| B. | Length of a table | | 6 feet |
| C. | Width of a table | 36 inches | |
| D. | Width of the door | 30 inches | |
| E. | Height of the door | | 7 feet |


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Name _____ Date _____

2. Peter used what he knows about equivalent ratios to find the height of the shelf in inches.





I looked at the relationship between the denominators. Two feet is twice, or double, one foot. That means I have to double the number of inches in the numerator.

Peter

Use Peter's strategy to complete the number sentences.

A. $\frac{12 \text{ inches}}{1 \text{ foot}} = \frac{\square \text{ inches}}{4 \text{ feet}}$ B. $\frac{1 \text{ foot}}{12 \text{ inches}} = \frac{\square \text{ feet}}{60 \text{ inches}}$

C. Show or tell how you solved Question 2B.

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*Answers and/or discussion are included in the lesson.