

Chapter 13 Review

Household Hypotenuses

You will need a tape measure, measuring tape, or yardstick and a parent or friend to help. Convert measurements that are fractions into decimals. Round all solutions to the nearest hundredth.

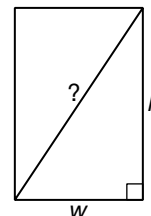
(Example: $2\frac{1}{8}$ inches \approx 2.13 inches)

1. Measure the height and width of your front door. Write an equation and solve for the length of the diagonal of the door. Then measure the actual diagonal and compare.

Equation:

Solution:

Actual:



2. Measure the width and height of a window. Write an equation and solve for the length of the diagonal of the window. Then measure the actual diagonal and compare.

Equation:

Solution:

Actual:

3. Measure the width and diagonal of your TV screen. Write an equation and solve for the height of the TV screen. Then measure the actual height and compare.

Equation:

Solution:

Actual:

4. Measure the length and the diagonal of the top of the mattress on your bed. Write an equation and solve for the width of the mattress. Then measure the actual width and compare.

Equation:

Solution:

Actual:

5. Give some reasons why your solutions are different from the actual measurements.

Answers are located on page 141.