

Name: _____ **KFY** _____ Date: _____

MISSING DIMENSIONS

VOCABULARY

DIMENSION: a measure in one direction

INVERSE OPERATION: operations that undo each other

HOW DO I FIND A MISSING DIMENSION???

***Use the inverse operation of the appropriate formula!!!!

***PERIMETER ONLY → After you subtract, be sure to divide the difference by 2 to find ONE dimension!!

EXAMPLES:

The Smith family bought a rectangular sandbox. The area of the sandbox is 192 square meters. If the length is 12 meters, what is the width of the sandbox?

STEP ONE: $A = L \times W$

STEP TWO: $192 = 12 \times W$

STEP THREE: $192 \div 12 = 16$

ANSWER: 16 meters wide

Jane is measuring the length and width of a door. The length is 99 inches long. The perimeter of the door is 264 inches. What is the width of the door?

STEP ONE: $P = L + W + L + W$

STEP TWO: $264 = 99 + W + 99 + W$

STEP THREE: $264 - 99 = 165$

$$165 - 99 = 66$$

$$66 \div 2 = 33$$

ANSWER: 33 inches wide

A rectangular field has a width of 90 meters. The perimeter of the field is 340 meters. What is the length of the field?

STEP ONE: $P = L + W + L + W$

STEP TWO: $340 = L + 90 + L + 90$

STEP THREE: $340 - 90 = 250$

$$250 - 90 = 160$$

$$160 \div 2 = 80$$

ANSWER: 80 meters long

Kyle has a square garden in his backyard. The area of the garden is 164 square feet. What is the side length of the garden?

STEP ONE: $A = 4 \times S$

STEP TWO: $164 = 4 \times S$

STEP THREE: $164 \div 4 = 41$

ANSWER: 41 feet