

# Finding the Part

## Objectives:

- To find the part, using the percent box, when the whole and percent are know

## Outcomes:

- To complete the “Finding the Part” worksheet with at least a 90% score

## Warm-Up:

The percent box takes the mystery out of finding where to put each of the numbers in a percent problem. It is an excellent tool for visual learners. It is easy to remember and easy to use for all types of percentage problems. The student does not need to do percent or fraction conversions when using the box.

## New Instruction:

The main box is divided into four squares. The upper left square is marked “is/part”. The lower left square is marked “of/whole”. The upper right square is marked “percent”. Finally, the bottom right square is always filled in with “100”.

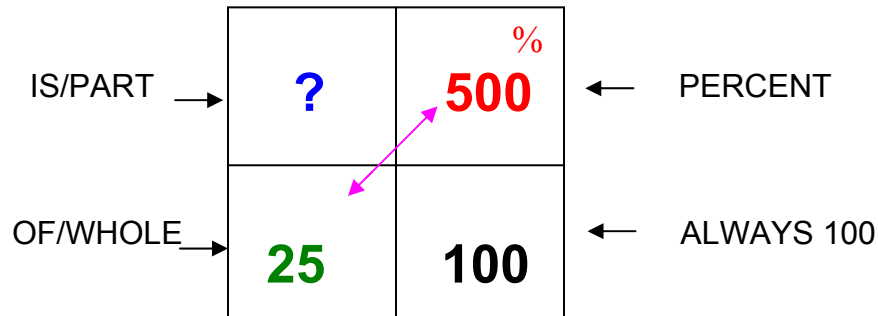
After placing the numbers in the appropriate squares, cross-multiply the numbers in the two filled-in squares that are diagonal from each other. Divide the answer by the leftover number.

<b>Is/Part</b>	<b>%</b>
<b>Of/Whole</b>	<b>100</b>

In the following example, the boxes are color coordinated for easy placement of numbers.

### FINDING THE PART

What is 500% of 25?



1. Fill in squares with percent and whole.
2. Cross-multiply numbers in two filled-in squares.  
 $500 \times 25 = 12,500$
3. Divide answer by the extra number (100).  
 $12,500 \div 100 = 125$

**ANSWER:** 125 is 500% of 25

### Feedback and Review:

Practice by doing the following problems using the percent box.

1. What is 300% of 60?
2. 90% of 120 is what number?
3.  $\frac{1}{2}\%$  of 30 is what number?
4. What is  $8\frac{1}{2}\%$  of 120?
5. 1% of 50 is what number?
6. A survey of the hospital showed that there are 275 employees. 20% of those are women. How many women work at the hospital?

7. Carol wants to save 15% of her monthly salary. If she makes \$1200 per month, how much will she save?
8. Tim bought a radio for \$50.00. The sales tax rate is  $7\frac{1}{2}\%$ . How much did he pay in sales tax?
9. The Wilson family went on vacation and spent a total of \$600. 30% of that was spent on an amusement park. How much did they spend on the amusement park?
10. The Best Lawn Company charged \$125.00 to fertilize a standard lawn. They must raise their price by 25%. How much will the price increase?

**Answers:**

1. 180
2. 108
3. 0.15
4. 10.2
5. 0.50
6. 55
7. \$180
8. \$3.75
9. \$180
10. \$31.25

## **Transfer of Knowledge or Skills:**

Real life application:

Find newspaper ads where sale items are featured. Find ads where you know the percentage and whole, and then find the "is/part" by using the percent box.