



# Math Study Strategies

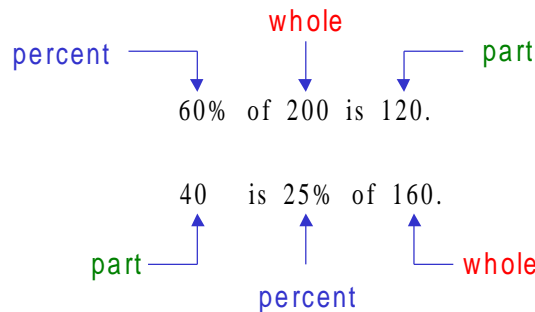
## Math for Sewing

### Percents

Percent problems can be expressed in one of two forms, shown below.

**60% of 200 is 120.**      **40 is 25% of 160.**

All percent problems have three components:  
The **percent** is the number just before the % sign.  
The **whole** is the number that follows the word **of**.  
The **part** is the number before or after the word **is**.



Percent problems can be organized into grids like the one shown below.

part	percent
whole	100

To solve percent problems, follow these steps:  
45 is what percent of 60?

Step 1: Place the known information on a grid.

45 part	? percent
60 whole	100 100

The proportion is:  $\frac{45}{60} = \frac{n}{100}$

Step 2: Multiply the known diagonals.  $45 \times 100 = 4,500$

Step 3: Divide by the remaining number.  $\frac{4,500}{60} = 75$

Step 4: If the answer is a percent, add the percent sign. **75%**

**45 is 75% of 60**