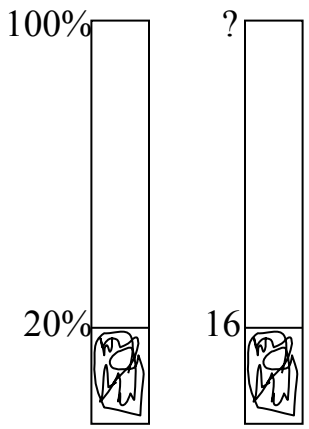
**Study the following.**

You can also solve percent equations with the other parts of the proportion missing.

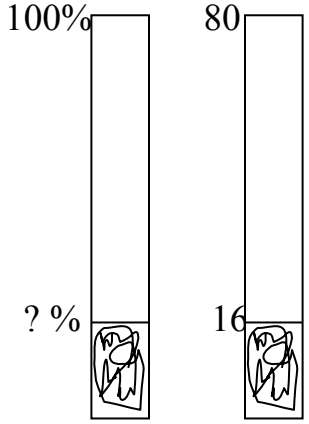
Example: 20% of ? = 16




$$\frac{100}{20} = \frac{?}{16} \quad \begin{matrix}\text{wholes} \\ \text{parts}\end{matrix}$$

$$20 \times ? = 100 \times 16$$
$$20 \times ? = 1600$$
$$? = 80$$

Example: ? % of 80 = 16




$$\frac{100}{?} = \frac{80}{16}$$

$$80 \times ? = 100 \times 16$$
$$80 \times ? = 1600$$
$$? = 20$$

**Draw a diagram. Write a proportion. Solve.**

1. 40% of ? = 60

2. ?% of 55 = 11

3. 25% of ? = 16

4. ?% of 20 = 2

**Solve these word problems.**

1. 7 is what percent of 100?

2. 3 is what percent of 60?

3. 20 is what percent of 80?

4. 30 is what percent of 60?

1. What is 35 % of 200?

2. What is 40% of 60?

3. What is 10% of 50?

4. What is 5% of 80?

1. 6 is 50% of what?

2. 40 is 20% of what?

3. 84 is 21% of what?

4. 45 is 6% of what?

1. 70 is what percent of 140?

2. What is 60% of 40?

3. 20 is 4% of what?

4. 10 is what percent of 250?

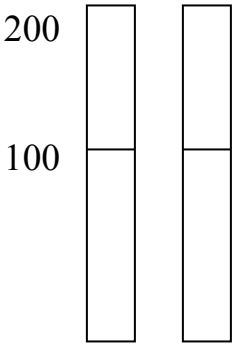
5. What is 6 percent of 800?

6. 16 is 50 percent of what?

**Study the following.**

Here are some examples of percentage problems with percents greater that 100.
Example 1: What is 200% of 60?

A diagram will look as follows.

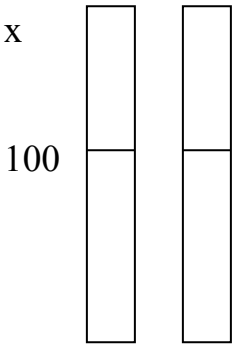



$100\ x = 200 \times 60$

$100\ x = 12{,}000$

$x = 120$ Answer: 120

Example 2: 60 is what percent of 30?
A diagram will look as follows.




$30\ x = 100 \times 60$

$30\ x = 6{,}000$

$x = 200$ Answer: 200%

**Solve.**

1. What is 120% of 80?

2. 90 is what percent of 45?

3. 30 is 300 percent of what?

4. What is 250% of 40?