

1st Approach:

150 is what percent of 600?

- 1) To answer this question, write a fraction that compares the two: $\frac{\text{part}}{\text{whole}}$
- 2) What's the part? 150
- 3) What's the whole? 600
- 4) Setup the fraction: $\frac{150}{600}$
- 5) Perform the division and multiply by 100 to get a percent: $(0.25)(100)=25\%$

$$6) \frac{\text{part}}{\text{whole}} \cdot 100 = \frac{150}{600} \cdot 100 = 25\%$$

2nd Approach (more formal) :

- 1) Setup a proportion as shown below.

$$\frac{x}{100} = \frac{\text{part}}{\text{whole}}$$

- 2) Replace the part with 150, and the whole with 600.

$$\frac{x}{100} = \frac{150}{600}$$

- 3) Multiply both sides by 100.

$$3a) \text{ Setup the multiplication: } 100 \cdot \frac{x}{100} = \frac{150}{600} \cdot 100$$

$$3b) \text{ Clear the 100's from the left side: } x = \frac{150}{600} \cdot 100 = (0.25) \cdot 100 = 25\%$$

3rd Approach: (for those who wish to truly understand)

- 1) Divide 600 into 100 equal parts: $\frac{600}{100} = 6$
- 2) How many of these equal parts fit inside 150? $\frac{150}{6} = 25$