

Percent Proportion

9/28

* Use to Find when you are looking for:

- A percent
- The whole
- The part

$$\frac{\%}{100} = \frac{\text{IS (part)}}{\text{of (whole)}}$$

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Example

$$\frac{\%}{100} = \frac{\text{is}}{\text{of}}$$

① What % of 50 is 12?

② 30% of what # is 65?

~~$$\frac{x}{100} = \frac{12}{50}$$~~

$$\frac{50x}{50} = \frac{1200}{50}$$

$$x = 24\%$$

~~$$\frac{30}{100} = \frac{65}{x}$$~~

$$\frac{30x}{30} = \frac{6500}{30}$$

$$x = 216 \frac{2}{3}$$

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③ What is 5% of 42?

$$\frac{5}{100} = \frac{x}{42}$$

$$\frac{100x}{100} = \frac{210}{100}$$

$$x = 2.1$$

④ What % of 60 is 25?

$$\frac{x}{100} = \frac{25}{60}$$

$$\frac{2500}{100} = \frac{60x}{100}$$

$$x = 41.\bar{6} \text{ } 41\frac{2}{3}\%$$

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There are 35 members in a club. The rules require that 60% must be present in order to pass any vote. What is the least amount of members that must be present?

$$\frac{\%}{100} = \frac{\text{Part}}{\text{Whole}}$$

$$\frac{60}{100} = \frac{x}{35}$$

$$\frac{100x}{100} = \frac{2100}{100}$$

$$x = 21 \text{ members}$$

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Sally's soccer team played 25 games and won 17 of them. What percent did they lose?

$$\frac{\%}{100} = \frac{\text{is (part)}}{\text{of (whole)}}$$

$$\frac{x}{100} = \frac{17}{25}$$

$$\frac{1700}{25} = \frac{25x}{25}$$

68% - won

100
- 68

32%
Lost

$$\frac{x}{100} = \frac{8}{25} \quad \frac{25}{8}$$

$$\frac{800}{25} = \frac{25x}{25}$$

x = 32%
Lost

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