

Key

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

Unit 8: Percent

8.2: Percent and Proportions

Write and solve A PROPORTION to answer each question.

What number is 0.6% of 30? $\frac{x}{30} = \frac{0.6}{100}$ $100x = 18$ $x = .18$	What number is 110% of 70? $\frac{x}{70} = \frac{110}{100}$ $100x = 7700$ $x = 77$
30% of 140 is what number? $\frac{30}{100} = \frac{x}{140}$ $100x = 4200$ $x = 42$	150% of 22 is what number? $\frac{150}{100} = \frac{x}{22}$ $100x = 3300$ $x = 33$
20 is 40% of what number? $\frac{20}{x} = \frac{40}{100}$ $40x = 2000$ $x = 50$	42 is 8% of what number? $\frac{42}{x} = \frac{8}{100}$ $8x = 4200$ $x = 525$
8% of what number is 16? $\frac{8}{100} = \frac{16}{x}$ $8x = 1600$ $x = 200$	32 is what percent of 128? $\frac{32}{128} = \frac{x}{100}$ $128x = 3200$ $x = 25\%$
30 is what percent of 80? $\frac{30}{80} = \frac{x}{100}$ $80x = 3000$ $x = 37.5\%$	What percent of 48 is 36? $\frac{x}{100} = \frac{36}{48}$ $48x = 3600$ $x = 75\%$

Write and solve AN EQUATION to answer each question.

<p>62% of 150 is what number?</p> $.62 * 150 = x$ $\boxed{93 = x}$	<p>13% of 400 is what number?</p> $.13 * 400 = x$ $\boxed{52 = x}$
<p>175% of 8 is what number?</p> $1.75 * 8 = x$ $\boxed{14 = x}$	<p>12 is what percent of 30?</p> $12 = \frac{x}{100} * 30$ $.4 = \frac{x}{100}$ $\boxed{40\% = x}$
<p>72 is what percent of 80?</p> $72 = \frac{x}{100} * 80$ $.9 = \frac{x}{100}$ $\boxed{90\% = x}$	<p>156 is what percent of 60?</p> $156 = \frac{x}{100} * 60$ $2.6 = \frac{x}{100}$ $\boxed{260\% = x}$
<p>8% of what number is 2?</p> $.08 * x = 2$ $\boxed{x = 25}$	<p>64% of what number is 48?</p> $.64 * x = 48$ $\boxed{x = 75}$
<p>0.5% of what number is 3?</p> $.005 * x = 3$ $\boxed{x = 600}$	<p>What percent of 200 is 290?</p> $\frac{x}{100} * 200 = 290$ $\frac{x}{100} = 1.45$ $\boxed{x = 145\%}$
<p>What percent of 130 is 91?</p> $\frac{x}{100} * 130 = 91$ $\frac{x}{100} = .7$ $\boxed{x = 70\%}$	<p>What percent of 60 is 9?</p> $\frac{x}{100} * 60 = 9$ $\frac{x}{100} = .15$ $\boxed{x = 15\%}$