

Solutions to WS 17.1 - Percentages, #2-20 even

THE PERCENT PROPORTION

$$\frac{\text{PART}}{\text{WHOLE}} = \frac{\%}{100}$$

② 18 is 20% of what number?

$$\frac{18}{x} = \frac{20}{100}$$

$$\frac{20x}{20} = \frac{1800}{20}$$

$$x = 90 \quad \boxed{90}$$

④ What percent of 20 is 50?

$$\frac{50}{20} = \frac{x}{100}$$

$$\frac{20x}{20} = \frac{5000}{20}$$

$$x = 250$$

$$\boxed{250\%}$$

⑥ Find 45% of 120.

$$\frac{x}{120} = \frac{45}{100}$$

$$\frac{100x}{100} = \frac{5400}{100}$$

$$x = 54$$

$$\boxed{54}$$

⑧ Find 200% of 50.

$$\frac{x}{50} = \frac{200}{100}$$

$$\frac{100x}{100} = \frac{10000}{100}$$

$$x = 100$$

$$\boxed{100}$$

⑩ Find 45% of 80.

$$\frac{x}{80} = \frac{45}{100}$$

$$\frac{100x}{100} = \frac{3600}{100}$$

$$x = 36$$

$$\boxed{36}$$

⑫ What percent of 80 is 10?

$$\frac{10}{80} = \frac{x}{100}$$

$$\frac{80x}{80} = \frac{1000}{80}$$

$$x = 12.5$$

$$\boxed{12.5\%}$$

⑭ 8 is 20% of what number?

$$\frac{8}{x} = \frac{20}{100}$$

$$\frac{20x}{20} = \frac{800}{20}$$

$$x = 40$$

40

⑮ Find 50% of 124.

$$\frac{x}{124} = \frac{50}{100}$$

$$\frac{100x}{100} = \frac{6200}{100}$$

$$x = 62$$

62

⑰ Find 175% of 92.

$$\frac{x}{92} = \frac{175}{100}$$

$$\frac{100x}{100} = \frac{16100}{100}$$

$$x = 161$$

161

⑲ What percent of 35 is 105?

$$\frac{105}{35} = \frac{x}{100}$$

$$\frac{35x}{35} = \frac{10500}{35}$$

$$x = 300$$

300%