Solutions to WS 17.1 - Percentages, #1-19 odd

① Find 35% of 80.

$$\frac{x}{80} \times \frac{35}{100}$$

$$\frac{100x}{100} = \frac{2800}{100}$$

$$x = 28$$

$$\boxed{28}$$

③ What percent of 40 is 60?

$$\frac{60}{40} \times \frac{x}{100}$$

$$\frac{40x}{40} = \frac{6000}{40}$$

$$x = 150$$

$$\boxed{150\%}$$

THE PERCENT PROPORTION

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

⑤ 48 is 40% of what number?

$$\frac{48}{x} \times \frac{40}{100}$$

$$\frac{40x}{40} = \frac{4800}{40}$$

$$x = 120$$

$$\boxed{120}$$

⑦ Find 40% of 50.

$$\frac{x}{50} \times \frac{40}{100}$$

$$\frac{100x}{100} = \frac{2000}{100}$$

$$x = 20$$

$$\boxed{20}$$

⑨ 2 is what percent of 100

$$\frac{2}{100} = \frac{x}{100}$$

$$x = 2$$

(by common sense)

$$\boxed{2\%}$$

⑪ 30 is 60% of what number?

$$\frac{30}{x} \times \frac{60}{100}$$

$$\frac{60x}{60} = \frac{3000}{60}$$

$$x = 50$$

$$\boxed{50}$$

⑬ Find 180% of 40.

$$\frac{x}{40} \times \frac{180}{100}$$

$$\frac{100x}{100} = \frac{7200}{100}$$

$$x = 72$$

$$\boxed{72}$$

⑮ Find 30% of 120.

$$\frac{x}{120} \times \frac{30}{100}$$

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

$$x = 36$$

$$\boxed{36}$$

(17) What percent of 80 is 60?

$$\frac{60}{80} = \frac{x}{100}$$

$$\frac{80x}{80} = \frac{6000}{80}$$

$$x = 75$$

$$\boxed{75\%}$$

(19) 27 is 60% of what number?

$$\frac{27}{x} = \frac{60}{100}$$

$$\frac{60x}{60} = \frac{2700}{60}$$

$$x = 45$$

$$\boxed{45}$$