

## Percents as Proportions

① What is 15% of 40?

$$\frac{15}{100} = \frac{x}{40}$$

$$15 \times 40 \div 100 = 6$$

② 13 out of 17 is what percentage?

$$\frac{13}{17} = \frac{x}{100}$$

$$13 \times 100 \div 17 = 76.47\%$$

③ 3.96 is 11% of what number?

$$\frac{11}{100} = \frac{3.96}{x}$$

$$100 \times 3.96 \div 11 = 36$$

④ 23 is increased by 15%

① 15% of 23

$$\frac{15}{100} = \frac{x}{23}$$

$$15 \times 23 \div 100 = 3.45$$

②  $23 + 3.45 = 26.45$

115% of 23

$$\frac{115}{100} = \frac{x}{23}$$

$$115 \times 23 \div 100 = 26.45$$

⑤ Jake earns \$20,000 one year, the next he earns \$29,000, what % increase is this?

$$\frac{29000 - 20000}{20000} = \frac{x}{100}$$

$$29000 \times 100 \div 20000 = 145$$

45% increase