

Ch 7 & 8

Ratios, Proportions, and Percents

Ratio - a comparison of two quantities by division

three ways to write a ratio: $3 : 7$ 3 to 7 $\frac{3}{7}$

Proportion - an equation that states that two ratios are equivalent

Ratios

Careers that use ratios

toy designers
architects
engineers
maps
clothes designers
restaurants
chefs, caterers,
musician
photographers
eye doctor, physicians
mechanics
jewelers

artists, painters,
sculptors
Sherwin Williams
sports: baseball bat
hockey power play
win/lose
50/50 raffle
gas prices, unit price

Percents - use proportions to solve

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

Example:

5% of what is 3?

$$\frac{5}{100} = \frac{3}{x}$$

Answer: 60