

# 7.2

## Proportions

### What are Proportions?

Proportions are EQUAL RATIOS

$$\frac{3}{5} = \frac{6}{10}$$

**“3 is to 5 as 6 is to 10”**

### Using Cross Products to Solve Proportions

$$1) \frac{x}{25} = \frac{6}{10}$$

### Using Cross Products to Solve Proportions

$$2) \frac{x}{3} = \frac{5}{12}$$

### Using Cross Products to Solve Proportions

$$3) \frac{3x+1}{5} = \frac{x}{2}$$

### Using Cross Products to Solve Proportions

$$4) \frac{x-5}{12} = \frac{x+2}{5}$$

## Writing Proportions

### Example 5

Jim bought 8 tacos for \$4. Unfortunately, he was still hungry. So, he bought 6 more tacos. How much did he pay for the 6 tacos?

## Writing Proportions

### Example 6

A person who weighs 105 pounds on Earth would weigh about 17.5 on the moon. About how much would a 60 pound dog weigh on the moon?

## Writing Proportions

### Example 7

With a 5 lb bag of flour the cooking class can make 120 muffins. How many muffins can they make with a 2 lb bag of flour?