Ratio:

Examples:

Proportional:

Examples:

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1. State whether each of the following ratios are proportional. Give reasons for your answer.

   a) $\frac{11}{12}, \frac{18}{27}$ b) $\frac{6}{102}, \frac{1}{17}$ c) 11: 8 , 22 : 16

To solve a proportion, you need to find the value of the variable. You can cross-multiply, and solve.

2. Solve each proportion.

   a) $\frac{a}{7} = \frac{18}{42}$ b) $\frac{2}{18} = \frac{b}{6}$ c) $\frac{2}{14} = \frac{1}{k}$

If the proportion is in ratio form, first write each ratio as a fraction and then solve.

3. Solve each proportion.

   For a triple ratio, write as fractions and then solve one proportion at a time.

   a) $u : 12 = 25 : 10$ b) $5 : d = 4 : 6$ c) $6 : 8 : x = y : 2 : 4$

Solving Proportions (Try these on your own.)

a) $\frac{3}{5} = \frac{x}{20}$

b) $\frac{x}{3} = \frac{5}{6}$

c) $h : 25 = 4 : 10$

d) $4 : 3 : 1 = 10 : y : z$

To solve a word problem, write the information in a ratio using a variable for the unknown quantity. Then solve!

4. 2 cups of uncooked Kraft Dinner noodles yields 3 cups of cooked Kraft Dinner noodles. How many cups of uncooked noodles are needed to make 36 cups of cooked noodles?

Homework:

pg. 4 #3, 4 + Handout