

Ratios

Ratios = make the same comparison are equivalent by division

Equivalent Ratios = Ratios that make the same comparison

Proportion = Ratios that are equivalent

Example Problem:

$$\frac{12}{15} \div \frac{3}{5} = \frac{4}{5}$$

$$\frac{\text{Price for pack } \$4.99}{\# \text{ of tape rolls } 3} = \$1.66 \text{ per pack}$$

$$\frac{\text{Price for pack } 15.49}{\# \text{ of tape rolls } 10} = \$1.55$$

Rate = a comparison of two quantities that have different units.

unit rates = are rates in which

the second quantity is 1.

unit price = is a unit rate used to compare costs per item
It's 3 for \$4.99 for tape or 10 for \$15.49, which is a better buy?

- Cross multiply
- If the cross products are the same the ratios are proportional.

EXAMPLE Problem

$$\frac{6}{15} \stackrel{?}{=} \frac{4}{10}$$

$$\frac{6}{15} \times \frac{4}{10} = \frac{60}{60}$$

Cross Multiply

They are proportional