Lesson 2: Proportional Relationships

Classwork

Example 1: Pay by the Ounce Frozen Yogurt!

A new self-serve frozen yogurt store opened this summer that sells its yogurt at a price based upon the total weight of the yogurt and its toppings in a dish. Each member of Isabelle's family weighed their dish and this is what they found. Determine if the cost is proportional to the weight.

Weight (ounces)	12.5	10	5	8	15	x
Cost ($)	5	4	2	3.20	$6	y

÷0.40 ÷0.40 ÷0.40 ÷0.4

$\frac{\$5}{12.5 \text{ ounces}}$ → $0.40 per ounce $\frac{4}{10}$ → $0.40 per ounce

15 × 0.4 = 6

weight × 0.4 = cost

x × 0.4 = y

y = 0.4x

The cost is proportional to the weight.

y = 0.4x

y = cost, x = weight

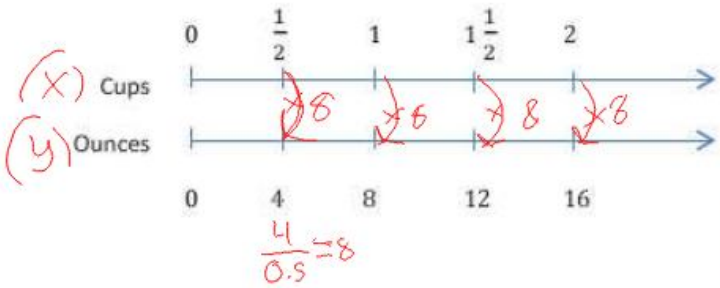
2 × 3 = 6

6 = 3 × 2

Example 2: A Cooking Cheat Sheet!

In the back of a recipe book, a diagram provides easy conversions to use while cooking.

Ounces / cups



Ounce = 8 × cups

y = 8x

The ounces are proportional to the cups.