

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	8
Cost (\$)	5	4	2	3.20	\$6	0

Handwritten notes: Arrows point from each weight to its corresponding cost, all labeled "0.40". Below the table, calculations show: $\frac{\$5}{12.5 \text{ ounces}} = \0.40 per ounce and $\frac{4}{10} \rightarrow \0.40 per ounce .

The cost is proportional to the weight.

$$y = 0.4x$$

Handwritten labels: "y" is labeled "Cost", "x" is labeled "weight".

Handwritten calculations:

$$15 \times 0.4 = 6$$

$$\text{weight} \times 0.4 = \text{cost}$$

$$x \times 0.4 = y$$

$$y = 0.4x$$

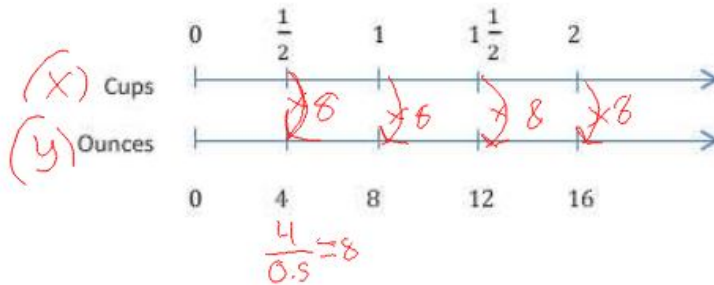
$$2 \times 3 = 6$$

$$6 = 3 \times 2$$

Example 2: A Cooking Cheat Sheet!

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

Ounces
Cups



Handwritten notes:

$$\text{Ounce} = 8 \times \text{cups}$$

$$y = 8x$$

The ounces are proportional to the cups.