

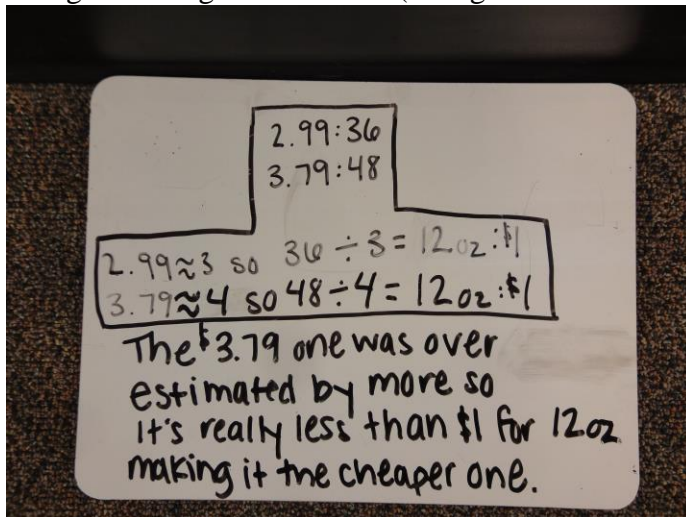
Laundry Detergent Task (with solutions)

IS BIGGER = CHEAPER?

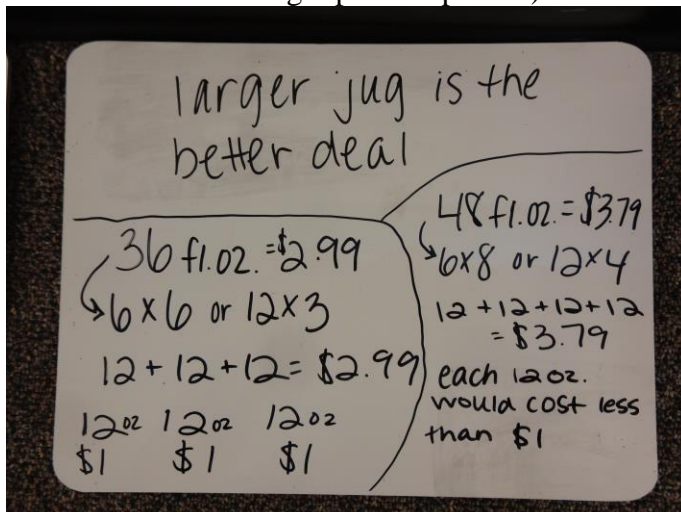
Let's say you want to buy some laundry detergent. The small jug costs \$2.99 for 36 fluid ounces, and the large jug costs \$3.79 for 48 fluid ounces. Which is the better buy? How do you know?

Bassarear & Moss (2016)

Using reasoning & estimation (enough to answer the question):



Determining how many ounces per dollar & comparing (Note: you could use a picture/diagram here for those who might prefer a picture):



Unit rate (what is the cost per 1 ounce?):

$\$2.99 \div 36 = .083 = 1 \text{ oz}$
 $\$3.79 \div 48 = .078 = 1 \text{ oz}$

$$\frac{.078}{1} < \frac{.083}{1}$$

The 48 oz is better for \$3.79 because it is cheaper per oz. 1 oz is \$.07, whereas an oz for the other jug would cost \$.08.

Unit rate (how many ounces of detergent do we get for \$1?):

$\$2.99$ for 36 oz
 $\$3.79$ for 48 oz

$$\frac{2.99}{36} \approx \frac{1.00}{12 \text{ ish}}$$
$$\frac{3.79}{48} \approx \frac{1.00}{13 \text{ ish}}$$