

Name _____

Date _____

1. Rewrite the division expression as a fraction, and divide. The first two have been started for you.

<p>a. $2.4 \div 0.8 = \frac{2.4}{0.8}$</p> $= \frac{2.4 \times 10}{0.8 \times 10}$ $= \frac{24}{8}$ $= 3$	<p>b. $2.4 \div 0.08 = \frac{2.4}{0.08}$</p> $= \frac{2.4 \times 100}{0.08 \times 100}$ $= \frac{240}{8}$ $= 30$
<p>c. $4.8 \div 0.6 = \frac{4.8}{0.6}$</p> $= \frac{4.8 \times 10}{0.6 \times 10}$ $= \frac{48}{6} = 8$	<p>d. $0.48 \div 0.06 = \frac{0.48}{0.06}$</p> $= \frac{0.48}{0.06} \times \frac{100}{100}$ $= \frac{48}{6} = 8$
<p>e. $8.4 \div 0.7 = \frac{8.4}{0.7}$</p> $= \frac{8.4}{0.7} \times \frac{10}{10}$ $= \frac{84}{7}$ $= 12$	<p>f. $0.84 \div 0.07 = \frac{0.84}{0.07}$</p> $= \frac{0.84}{0.07} \times \frac{100}{100}$ $= \frac{84}{7}$ $= 12$
<p>g. $4.5 \div 1.5 = \frac{4.5}{1.5}$</p> $= \frac{4.5}{1.5} \times \frac{10}{10}$ $= \frac{45}{15}$ $= 3$	<p>h. $0.45 \div 0.15 = \frac{0.45}{0.15}$</p> $= \frac{0.45}{0.15} \times \frac{100}{100}$ $= \frac{45}{15}$ $= 3$

<p>i. $14.4 \div 1.2 = \frac{14.4}{1.2}$</p> $= \frac{14.4}{1.2} \times \frac{10}{10}$ $= \frac{144}{12} = 12$	<p>j. $1.44 \div 0.12 = \frac{1.44}{0.12}$</p> $= \frac{1.44}{0.12} \times \frac{100}{100}$ $= \frac{144}{12} = 12$
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2. Leann says $18 \div 6 = 3$, so $1.8 \div 0.6 = 0.3$ and $0.18 \div 0.06 = 0.03$. Is Leann correct? How would you explain how to solve these division problems?

$$18 \div 6 = \frac{18}{6} = 3$$

$$1.8 \div 0.6 = \frac{1.8}{0.6}$$

$$= \frac{1.8}{0.6} \times \frac{10}{10}$$

$$= \frac{18}{6} = 3$$

$$0.18 \div 0.06 = \frac{0.18}{0.06}$$

$$= \frac{0.18}{0.06} \times \frac{100}{100}$$

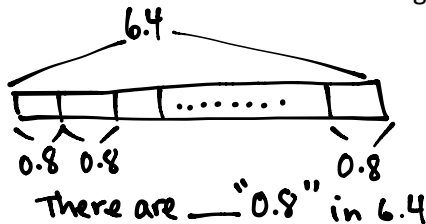
$$= \frac{18}{6} = 3$$

Leann is incorrect.

All three division problems are equivalent to $\frac{18}{6}$, so their quotient is 3.

3. Denise is making bean bags. She has 6.4 pounds of beans.

a. If she makes each bean bag 0.8 pounds, how many bean bags will she be able to make?



$$6.4 \div 0.8 = \frac{6.4}{0.8}$$

$$= \frac{6.4}{0.8} \times \frac{10}{10} = \frac{64}{8} = 8$$

She will be able to make 8 bean bags.

b. If she decides instead to make mini bean bags that are half as heavy, how many can she make?

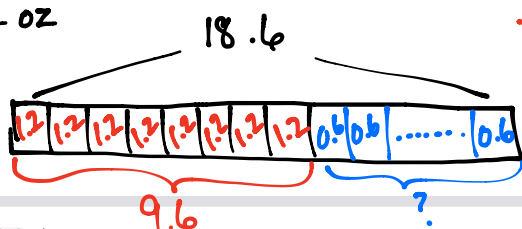
$$6.4 \div 0.4 = \frac{6.4}{0.4}$$

$$= \frac{6.4}{0.4} \times \frac{10}{10} = \frac{64}{4} = 16$$

She will be able to make twice as many, which is 16 bean bags.

4. A restaurant's small salt shakers contain 0.6 ounces of salt. Its large shakers hold twice as much. The shakers are filled from a container that has 18.6 ounces of salt. If 8 large shakers are filled, how many small shakers can be filled with the remaining salt?

Small = 0.6 oz
Large = 1.2 oz



$$\begin{array}{r} 1.2 \\ \times 8 \\ \hline 9.6 \end{array}$$

$$9.0 \div 0.6 = \frac{9.0}{0.6}$$

15 small shakers

$$\begin{array}{r} 18.6 \\ - 9.6 \\ \hline 9.0 \end{array}$$

$$= \frac{9.0}{0.6} \times \frac{10}{10} = \frac{90}{6} = 15$$