

Name _____ Date _____

1. Convert. Express your answer as a mixed number, if possible.

a. $2 \text{ ft} = \frac{2}{3} \text{ yd}$

$2 \text{ ft} = 2 \times 1 \text{ ft}$

$= 2 \times \frac{1}{3} \text{ yd}$

$= \frac{2}{3} \text{ yd}$

b. $6 \text{ ft} = \frac{6}{3} \text{ yd}$

$6 \text{ ft} = 6 \times 1 \text{ ft}$

$= 6 \times \frac{1}{3} \text{ yd}$

$= \frac{6}{3} \text{ yd}$

c. $5 \text{ in} = \frac{5}{12} \text{ ft}$

$5 \text{ in} = 5 \times 1 \text{ in}$
 $= 5 \times \frac{1}{12} \text{ ft}$
 $= \frac{5}{12} \text{ ft}$

d. $14 \text{ in} = \frac{14}{12} \text{ ft}$

$14 \text{ in} = 14 \times 1 \text{ in}$
 $= 14 \times \frac{1}{12} \text{ ft}$
 $= \frac{14}{12} \text{ ft} = 1\frac{2}{12} \text{ ft}$

e. $7 \text{ oz} = \frac{7}{16} \text{ lb}$

$7 \text{ oz} = 7 \times 1 \text{ oz}$
 $= 7 \times \frac{1}{16} \text{ lb}$
 $= \frac{7}{16} \text{ lb}$

f. $20 \text{ oz} = \frac{20}{16} \text{ lb}$

$20 \text{ oz} = 20 \times 1 \text{ oz}$
 $= 20 \times \frac{1}{16} \text{ lb}$
 $= \frac{20}{16} \text{ lb} = 1\frac{4}{16} \text{ lb}$

g. $1 \text{ pt} = \frac{1}{2} \text{ qt}$

$1 \text{ pt} = 1 \times 1 \text{ pt}$
 $= 1 \times \frac{1}{2} \text{ qt}$
 $= \frac{1}{2} \text{ qt}$

h. $4 \text{ pt} = \frac{4}{2} \text{ qt}$

$4 \text{ pt} = 4 \times 1 \text{ pt}$
 $= 4 \times \frac{1}{2} \text{ qt}$
 $= \frac{4}{2} \text{ qt} = 2 \text{ qt}$

2. Marty buys 12 ounces of granola.

a. What fraction of a pound of granola did Marty buy?

$$12 \text{ oz} = \frac{12}{16} \text{ lb}$$

$$\begin{aligned} 12 \text{ oz} &= 12 \times 1 \text{ oz} \\ &= 12 \times \frac{1}{16} \text{ lb} \\ &= \frac{12}{16} \text{ lb} \end{aligned} \quad \begin{aligned} \text{Marty bought } \frac{12}{16} \text{ lb} \\ \text{of granola.} \end{aligned}$$

b. If a whole pound of granola costs \$4, how much did Marty pay?

$$\frac{12}{16} \text{ lb of } \$4 \Rightarrow \frac{12}{16} \times \frac{4}{1} = \frac{12}{4} = \$3$$

Marty paid \$3 for the granola.

3. Sara and her dad visit Yo-Yo Yogurt again. This time, the scale says that Sara has 14 ounces of vanilla yogurt in her cup. Her father's yogurt weighs half as much. How many pounds of frozen yogurt did they buy altogether on this visit? Express your answer as a mixed number.

yogurt

Sara	dad
14 oz	$\frac{1}{2}$ of 14 oz
	7 oz

Altogether, they bought $1\frac{5}{16}$ lb of yogurt.

$$21 \text{ oz} = 1\frac{5}{16} \text{ lb}$$

$$\begin{aligned} 21 \text{ oz} &= 21 \times 1 \text{ oz} \\ &= 21 \times \frac{1}{16} \text{ lb} \\ &= \frac{21}{16} \text{ lb} = 1\frac{5}{16} \text{ lb} \end{aligned}$$

4. An art teacher uses 1 quart of blue paint each month. In one year, how many gallons of paint will she use?

blue paint

1 qt	1 qt	1 qt	1 qt	12 qt
				1 year

She will use 3 gallons of blue paint in one year.

$$12 \text{ qt} = 3 \text{ gal}$$

$$\begin{aligned} 12 \text{ qt} &= 12 \times 1 \text{ qt} \\ &= 12 \times \frac{1}{4} \text{ gal} \\ &= \frac{12}{4} \text{ gal} = 3 \text{ gal} \end{aligned}$$