

Display Master: Key Idea: Determine Proportionality by Using Simplification

- 2 ratios are proportional if they simplify to the same ratio.

Display Master: Chicken Soup A

$$\frac{9 \text{ cups of chicken}}{12 \text{ cups of tomato sauce}}$$

Display Master: Chicken Soup B

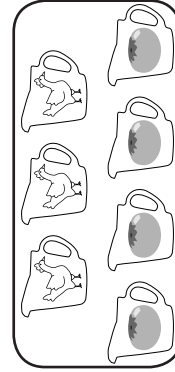
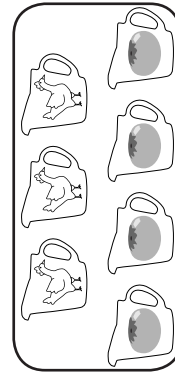
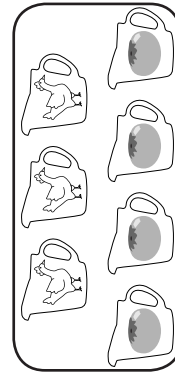
$$\frac{9 \text{ cups of chicken}}{12 \text{ cups of tomato sauce}} = \frac{\quad}{\quad}$$

$\div 3$ $\div 3$

Display Master: Chicken Soup C

$$\frac{9 \text{ cups of chicken}}{12 \text{ cups of tomato sauce}} = \frac{3 \text{ cups of chicken}}{4 \text{ cups of tomato sauce}}$$

$\div 3$ $\div 3$



Display Master: Chicken Soup D

15 cups of chicken

20 cups of tomato sauce

Display Master: Chicken Soup E

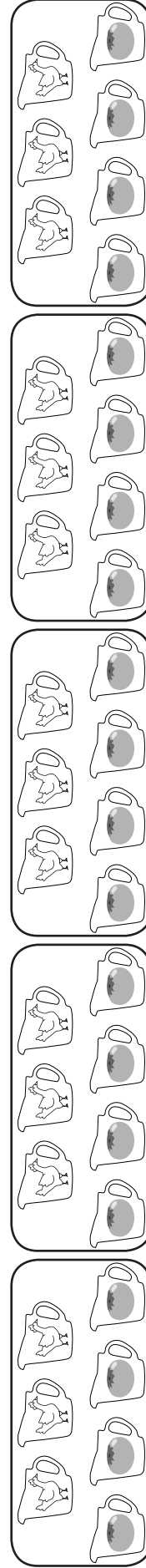
$$\frac{15 \text{ cups of chicken}}{20 \text{ cups of tomato sauce}} = \frac{\quad}{\quad}$$

$\div 5$ $\div 5$

Display Master: Chicken Soup F

$$\frac{15 \text{ cups of chicken}}{20 \text{ cups of tomato sauce}} = \frac{3 \text{ cups of chicken}}{4 \text{ cups of tomato sauce}}$$

$\div 5$ $\div 5$



Display Master: Chicken Soup G
$$\frac{9 \text{ cups of chicken}}{12 \text{ cups of tomato sauce}}$$
$$=$$
$$\frac{15 \text{ cups of chicken}}{20 \text{ cups of tomato sauce}}$$

Display Master: $\frac{2}{6}$ and $\frac{6}{12}$ A

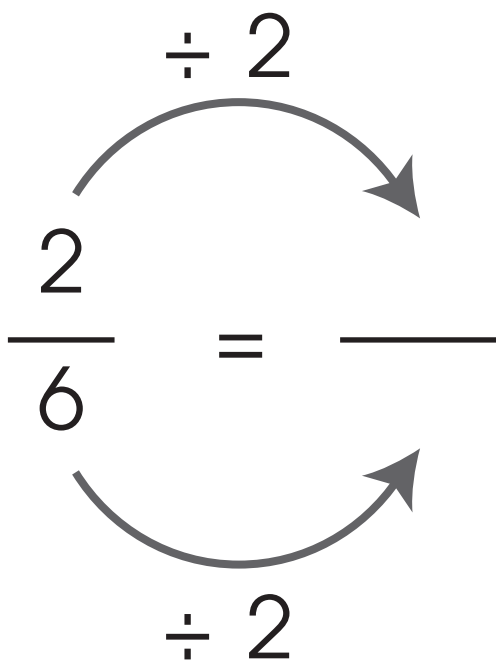
$$\frac{2}{6}$$

Display Master: $\frac{2}{6}$ and $\frac{6}{12}$ B

$$\frac{2}{6} = \frac{\quad}{\quad}$$

$\div 2$

$\div 2$



Display Master: $\frac{2}{6}$ and $\frac{6}{12}$ C

$$\frac{2}{6} = \frac{1}{3}$$

Diagram illustrating the simplification of the fraction $\frac{2}{6}$ to $\frac{1}{3}$ by dividing both the numerator and denominator by 2:

- Top arrow: $\div 2$ (from 2 to 1)
- Bottom arrow: $\div 2$ (from 6 to 3)

Display Master: $\frac{2}{6}$ and $\frac{6}{12}$ D

$$\frac{6}{12}$$

Display Master: $\frac{2}{6}$ and $\frac{6}{12}$ E

$$\frac{6}{12} \overset{\div 6}{\curvearrowright} \quad = \quad \frac{\quad}{\quad} \underset{\div 6}{\curvearrowleft}$$

Display Master: $\frac{2}{6}$ and $\frac{6}{12}$ F

$$\frac{6}{12} \overset{\div 6}{\curvearrowright} \frac{1}{2} = \frac{2}{6} \underset{\div 6}{\curvearrowright} \frac{1}{2}$$

Display Master: $\frac{2}{6}$ and $\frac{6}{12}$ G

$\frac{2}{6}$ is not proportional to $\frac{6}{12}$