

2 - 6

Equivalent Ratios

ratio: comparison of one number
to another

can be written 5 ways:

1 to 4 1:4 $\frac{1}{4}$.25 25%

**Ex: 15 successful kicks out of
20 attempts**

$$\frac{15}{20} = \left(\frac{3}{4} \right)$$

pay attention to order!

5 hats for 12 people

$$\frac{5}{12} \quad 5:12$$
$$\cancel{12} \times \cancel{5}$$

Write each ratio as a fraction in lowest terms:

Ex: 12c to 48c $\frac{12}{48} = \left(\frac{1}{4}\right)$

$$\frac{12}{48} = \frac{6}{24} = \frac{3}{12} = \frac{1}{4}$$

Ex: 65 min : 3 hr

65 min : 180 min $\frac{65}{180} = \left(\frac{13}{36}\right)$

Ex: 25cm to 5m

25 cm to 500 cm $\frac{25}{500} = \left(\frac{1}{20}\right)$

equivalent ratios: two ratios that represent the same comparison

* \times or \div each term by the same number

Find an equivalent ratio. Write the ratio as a fraction.

Ex: 2 to 3

$$\frac{20}{30}$$

$$\frac{2}{3} \begin{matrix} \times 2 \\ \times 2 \end{matrix} \quad \frac{4}{6}$$

($\times 4$)

$$\frac{8}{12}$$

Ex: 12 : 72

$$\frac{120}{720}$$

$$\frac{12}{72} \begin{matrix} \div 2 \\ \div 2 \end{matrix}$$

$$\frac{6}{36}$$

($\div 4$)

Ex:

$$\frac{3}{4} \begin{matrix} \times 4 \\ \times 4 \end{matrix}$$

$$\frac{30}{40}$$

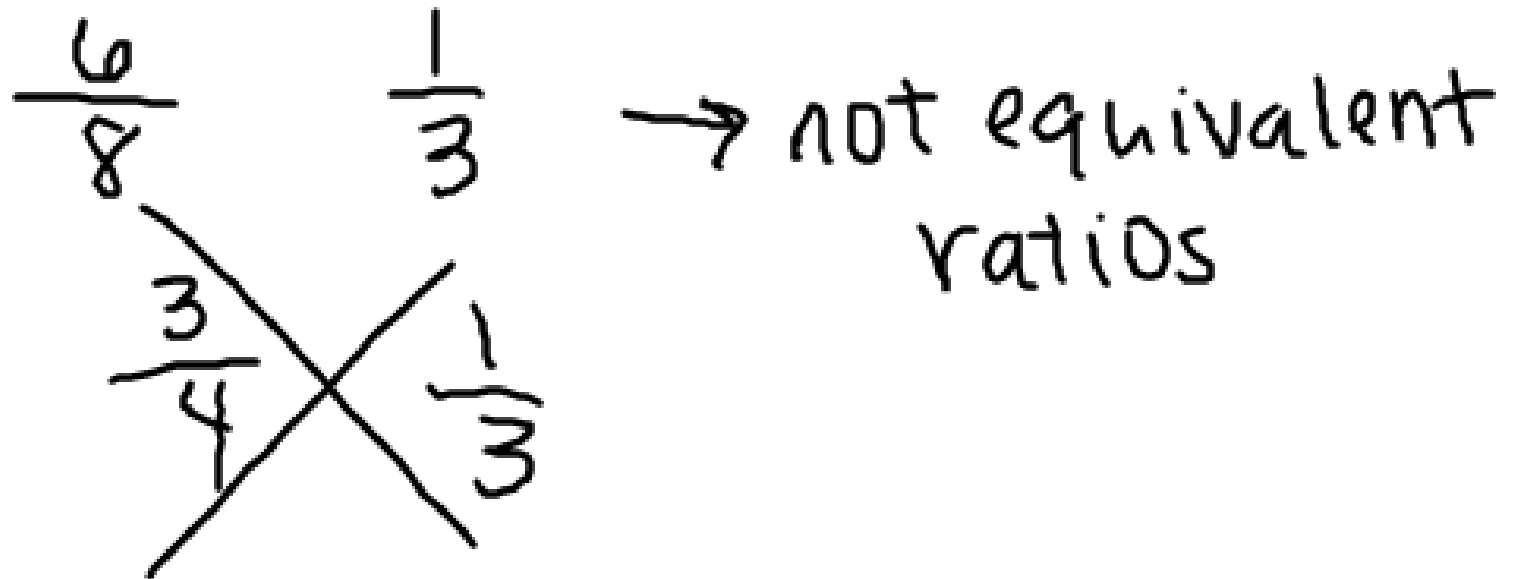
$$\frac{9}{12}$$

$$\frac{12}{16}$$

$$\frac{3}{8}$$

Another way to think of equivalent ratios is...

"Can they simplify to the same fraction?"

$$\frac{6}{8} \quad \frac{1}{3} \quad \rightarrow \text{not equivalent ratios}$$




Homework:

p. 75 #1-15

p. 73 #29-33