

JANUARY 14, 2015

STARTER

4th

Add each. Answers should be in simplest form.

1. $3\frac{1}{4} + 2\frac{3}{8}$

$$\begin{array}{r} 3\frac{1}{4} \times 2 \frac{2}{8} \\ + 2\frac{3}{8} \times 2 \frac{3}{8} \\ \hline 5\frac{5}{8} \end{array}$$

2. $7\frac{2}{5} + 4\frac{1}{2}$

$$\begin{array}{r} 7\frac{2}{5} \times 2 \frac{4}{10} \\ + 4\frac{1}{2} \times 5 \frac{5}{10} \\ \hline 11\frac{9}{10} \end{array}$$

3. $6\frac{5}{6} + 3\frac{3}{4}$

$$\begin{array}{r} 6\frac{5}{6} \times 2 \frac{10}{12} \\ + 3\frac{3}{4} \times 3 \frac{9}{12} \\ \hline 10\frac{19}{12} \end{array}$$

1/14 Ratios, Testing and Solving Proportions

What is a ratio?

a comparison of 2 values

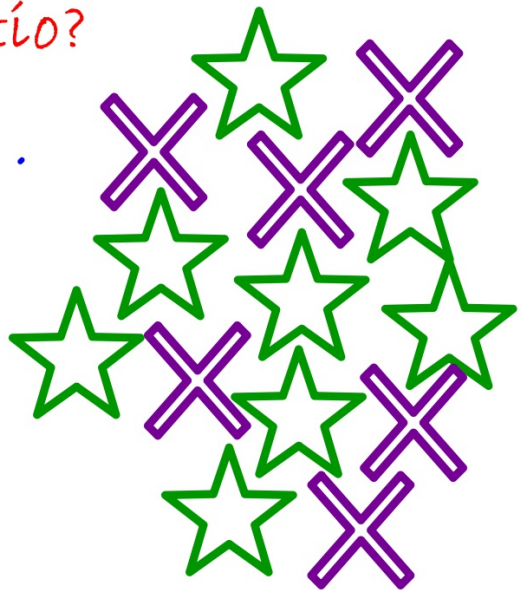
How do you write a ratio?

ratio of stars to X's.

8 : 6

$\frac{8}{6}$

8 to 6



If two ratios can both measure the same things, they are called equivalent.

"the Same"

$\frac{3}{4}$ and $\frac{6}{8} \div 2$
for every 3 x's
there are 4 ★'s.



$\frac{2}{3}$ and ?? $\frac{4}{6}$, $\frac{8}{12}$, $\frac{6}{9}$, $\frac{24}{36}$

Work with your partner and determine if these ratios are equivalent.

Be ready to explain why or why not.

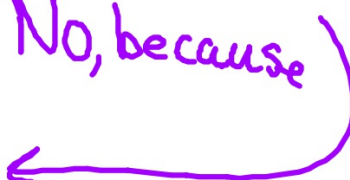
$$\frac{5 \cdot 4}{8 \cdot 4} \text{ and } \frac{20}{32}$$

Yes, because you times top & bottom by the same number.

$$\frac{4 \cdot 2}{5 \cdot 3} \text{ and } \frac{8}{15}$$

No, because the #'s you multiply top + bottom by are different

$$\frac{3 \cdot ?}{2 \cdot 3} = \frac{4}{6}$$

No, because 

What does the variable have to equal in order for the ratios to be equivalent?

$$\frac{3 \cdot 4}{8 \cdot 4} \text{ and } \frac{x}{32}$$

$$x = 12$$

$$\frac{4 \cdot 2}{b \cdot 2} \text{ and } \frac{8}{20}$$

$$b = 10$$

$$\frac{3 \cdot 3}{2 \cdot 3} \text{ and } \frac{9}{n}$$

$$n = 6$$

Solve each proportion...

$$\frac{3 \cdot 3}{8 \cdot 3} = \frac{x}{24}$$

$$9 = x$$

$$\frac{5 \cdot 4}{5 \cdot b} = \frac{5 \cdot 4}{6 \cdot 4} \quad \frac{4}{4 \frac{4}{5}} = \frac{5}{6}$$

$$\frac{5b}{5} = \frac{24}{5}$$

$$b = 4 \frac{4}{5}$$

$$\frac{10 \cdot 3}{10 \cdot 2} = \frac{10 \cdot 3}{n \cdot 3}$$

$$\frac{20}{3} = \frac{3n}{3}$$

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

$$\begin{array}{r} 3 \overline{) 20} \\ \underline{18} \\ 20 \\ \underline{18} \\ 2 \end{array}$$

$$\frac{c}{6} = \frac{8}{9}$$

Homework

HOMEWORK

DUE