

Name: _____

Mathematics

Ration & Equal Ratio

Ratios

A ratio is a comparison between the quantities of two things.

Example:

There are 3 triangles and 2 squares.



We can write the ratio as

3 : 2 or 3 to 2 or $\frac{3}{2}$

A. Write each ratio in three ways. Do not simplify fractions.

boys to girls



: or to or $\frac{\square}{\square}$

apples to bananas



: or to or $\frac{\square}{\square}$

Circles and Squares



: or to or $\frac{\square}{\square}$

Dogs to cats



: or to or $\frac{\square}{\square}$

B. Write each ratio in fraction form. Do not simplify.

i. $8 : 5 = \frac{\square}{\square}$

iii. $2 : 18 = \frac{\square}{\square}$

ii. $17 \text{ to } 34 = \frac{\square}{\square}$

iv. $7 \text{ to } 12 = \frac{\square}{\square}$

C. Write each ratio in its simplest form.

i. $10 : 6 = \boxed{\quad} : \boxed{\quad}$

iii. $3 : 9 = \boxed{\quad} : \boxed{\quad}$

ii. $12 \text{ to } 30 = \boxed{\quad} \text{ to } \boxed{\quad}$

iv. $15 \text{ to } 45 = \boxed{\quad} \text{ to } \boxed{\quad}$

D. Use cross multiplication to identify each equal ratio. Write YES or NO.

i. $\frac{5}{7} = \frac{35}{42} \quad \underline{\hspace{2cm}}$

iii. $\frac{4}{5} = \frac{16}{20} \quad \underline{\hspace{2cm}}$

ii. $\frac{25}{20} = \frac{10}{8} \quad \underline{\hspace{2cm}}$

iv. $\frac{7}{8} = \frac{14}{6} \quad \underline{\hspace{2cm}}$

E. Write the missing number in each proportion.

i. $\frac{n}{56} = \frac{3}{7} \quad n = \underline{\hspace{2cm}}$

iv. $\frac{12}{32} = \frac{n}{8} \quad n = \underline{\hspace{2cm}}$

ii. $\frac{16}{n} = \frac{2}{5} \quad n = \underline{\hspace{2cm}}$

v. $\frac{10}{15} = \frac{2}{n} \quad n = \underline{\hspace{2cm}}$

iii. $\frac{9}{4} = \frac{n}{8} \quad n = \underline{\hspace{2cm}}$

vi. $\frac{2}{5} = \frac{n}{25} \quad n = \underline{\hspace{2cm}}$