

Name: _____

Mathematics

Ratio & 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 $\frac{\text{input}}{\text{input}}$

apples to bananas



: or to or $\frac{\text{input}}{\text{input}}$

Circles and Squares



: or to or $\frac{\text{input}}{\text{input}}$

Dogs to cats



: or to or $\frac{\text{input}}{\text{input}}$

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

i. $8 : 5 = \frac{\text{input}}{\text{input}}$

iii. $2 : 18 = \frac{\text{input}}{\text{input}}$

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

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

C. Write each ratio in its simplest form.

i. $10 : 6 = \square : \square$

iii. $3 : 9 = \square : \square$

ii. $12 \text{ to } 30 = \square \text{ to } \square$

iv. $15 \text{ to } 45 = \square \text{ to } \square$

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

i. $\frac{5}{7} = \frac{35}{42}$ _____

iii. $\frac{4}{5} = \frac{16}{20}$ _____

ii. $\frac{25}{20} = \frac{10}{8}$ _____

iv. $\frac{7}{8} = \frac{14}{6}$ _____

E. Write the missing number in each proportion.

i. $\frac{n}{56} = \frac{3}{7}$ $n =$ _____

iv. $\frac{12}{32} = \frac{n}{8}$ $n =$ _____

ii. $\frac{16}{n} = \frac{2}{5}$ $n =$ _____

v. $\frac{10}{15} = \frac{2}{n}$ $n =$ _____

iii. $\frac{9}{4} = \frac{n}{8}$ $n =$ _____

vi. $\frac{2}{5} = \frac{n}{25}$ $n =$ _____