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 $\frac{3}{2}$

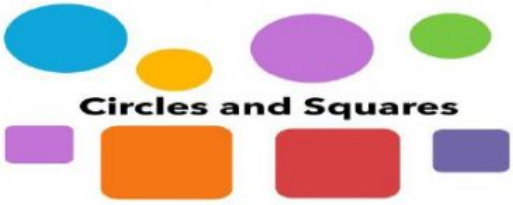
A. Write each ratio in three ways. Do not simplify fractions.

boys to girls

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

apples to bananas

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



□ : □ 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 = $\frac{\square}{\square}$

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

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

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

C. Write each ratio in its simplest form.

i. 10 : 6 = ☐ : ☐

ii. 12 to 30 = ☐ to ☐

iii. 3 : 9 = ☐ : ☐

iv. 15 to 45 = ☐ to ☐

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

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

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

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

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

E. Write the missing number in each proportion.

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

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

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

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

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

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