

Fruit Loop Ratios

Introduction:

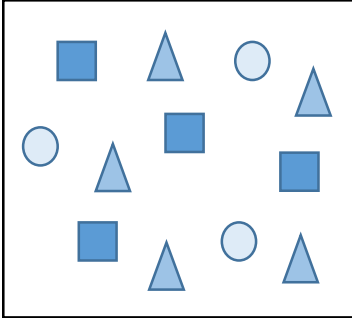
A ratio is a way to compare values. Ratios can be written in three ways:

Using the ":" to separate the values: 3 : 1

Instead of the ":" we can use the word "to": 3 to 1

Or write it like a fraction: $\frac{3}{1}$

For example, take this sample of shapes and compare the values.



1. Write a ratio for each of the following in all three ways:

a. Triangles to Squares

b. Circles to Triangles

c. Squares to Circles

Fruit Loop Activity:

- Sort your fruit loops by color on your desk.
- What is the total number of fruit loops? _____
- For each set, write the ratio all three ways.
 - Red fruit loops to Green fruit loops

b. Blue fruit loops to Yellow fruit loops

c. Purple fruit loops to Orange fruit loops

d. Blue fruit loops to Purple fruit loops

e. Red fruit loops to Orange fruit loops

f. (Red + Yellow) fruit loops to (Blue + Green) fruit loops

g. (Orange + Purple) fruit loops to (Yellow + Blue) fruit loops

h. (Green + Red) fruit loops to (Green + Blue) fruit loops

4. For each of the following compare three values using only the “:” to separate values.

a. Green fruit loops to Red fruit loops to Orange fruit loops

b. Blue fruit loops to Green fruit loops to Purple fruit loops

c. Yellow fruit loops to Orange fruit loops to Blue fruit loops

d. Purple fruit loops to Red fruit loops to Yellow fruit loops

Ratio Extension:

Ratios can be scaled up. For example you have 7 yellow fruit loops and 4 red fruit loops.

The ratio of yellow to red is: 7 : 4

This ratio can be scaled up to: 14 : 8

5. Compare these two ratios. How was the ratio scaled up? Is the ratio still the same? Explain

6. Scale up the following ratios by doubling each value. Write the initial ratio and the scaled ratio:

a. Red to Green: _____

b. Purple to Orange: _____

c. Yellow to Orange to Blue: _____

7. Compare the ratios in number 6. What changed? Did bumping up the ratios change the relationship between the colors? Explain.