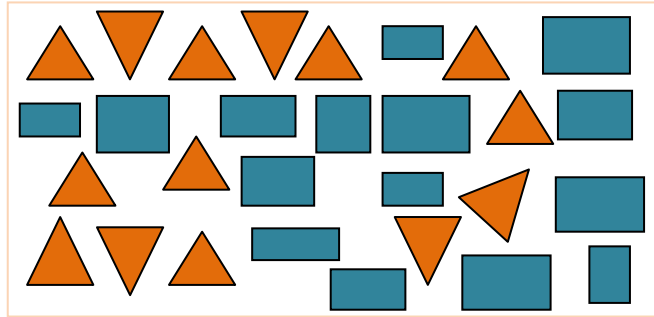


**Example**Ratios:

A ratio is a relationship between two units ('a' and 'b'). For every 'a' units of one quantity there are 'b' units of another quantity. A ratio can be expressed as "a to b" or a:b or  $\frac{a}{b}$ . Where 'a' and 'b' are the units.

The table shows the different geometric shapes John collected.



- Compare the number of triangles with total number of shapes.
- Compare the number of rectangles with total number of shapes.
- Compare the number of triangle with the number of rectangles.

Solution: Here total number of shapes = 29  
 Total number of triangles = 14  
 Total number of rectangles = 15

- i) The ratio of triangles and shapes is

$$\frac{\text{Total number of triangles}}{\text{Total number of shapes}} = \frac{14}{29}$$

- ii) The ratio of rectangles and shapes is

$$\frac{\text{Total number of rectangles}}{\text{Total number of shapes}} = \frac{15}{29}$$

- iii) The ratio of triangles to rectangles is

$$\frac{\text{Total number of triangles}}{\text{Total number of rectangles}} = \frac{14}{15}$$

**Exercise**

1. In a bag there are 5 red, 7 green, and 9 yellow apples. Write the ratio of each of the following pairs of apples.

a) Red apples to total apples

b) Green apples to yellow apples

c) Red apple to green apples

d) Yellow apples to total apples

## Exercise

- A van burns about 450 gallons of fuel 48 hours. About how much does the van burn in 1 hour?
- There are 48 black birds and 62 white birds in a garden. What relationships between the birds do the ratios 48:62, 48:110, and 62:110 compare?
- Pinky earns 77 points in math and 93 points in computer science. Which of the following ratios compares the earned points in math to the total earned points?
  - 77 : 93
  - 93 : 77
  - 77 : 170
  - 93 : 170
- The table shows the number of students with different eye colors in the sixth grade. Use the table to find the ratio following questions.

- a) Students with blue eyes  
to students with brown eyes.

<b><i>Eye color</i></b>	<b><i>No. of students</i></b>
Brown	19
Black	7
Blue	9
Yellowish	5

- b) Students with yellowish eyes to students with black eyes.

- c) Students with blue or black eyes to total students.