Name _____

Ratios

Essential Question How can you express real world quantities as ratios?

🔓 UNLOCK the Problem REAL WORLD

Max sells bouquets of roses. There are 3 yellow roses and 2 red roses. What is the ratio of yellow to red roses?
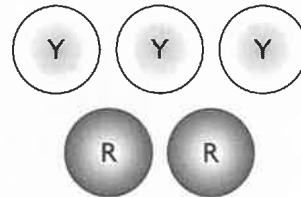
A ratio is a comparison of two numbers.

* A ratio is expressed by comparing one part to another, such as 4 feet to 20 toes, or 3 yellow roses to
  _____.

🔑 Activity

Materials ▪ two-color counters

Model the data.

STEP 1 Use 3 counters with the yellow side up to represent yellow roses and 2 counters with the red side up to represent red roses.

STEP 2 Write the ratio of yellow to red roses.
* Ratios can be written in different ways.
  3 to 2 or 3:2 or $\frac{3}{2}$ (as a fraction)

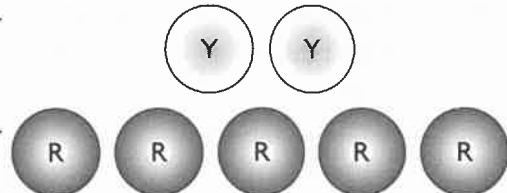So, the ratio of yellow roses to red roses is _3 to 2_ , _3:2_ , or _$\frac{3}{2}$_ .

In the example above, you compared a part to a part. You can also use a ratio to compare a part to a whole or a whole to a part.

Try This! Show a ratio of red counters to total counters.

STEP 1   Count to find the number of red counters. _____
_____

STEP 2   Count to find the total number of counters. _____
_____

STEP 3   Write the ratio. _____

Math Talk How would the ratio change if you found the ratio of total counters to red counters?

Share and Show

Find the ratio of red counters to yellow counters.
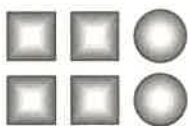
1a. How many red counters are there?

_____

R R Y R R Y Y

1b. How many yellow counters are there?

_____

1c. What is the ratio of red to yellow counters?

_____

Write the ratio.

2. squares to circles

_____

3. total squares to dark squares

_____

On Your Own

For 4–6, use the drawing to write the ratio.

4. dark to light

_____

5. light to dark

_____

6. light to total

_____

For 7–9, use the drawing to write the ratio.

7. triangles to circles

_____

8. dark to light

_____

9. total shapes to circles

_____
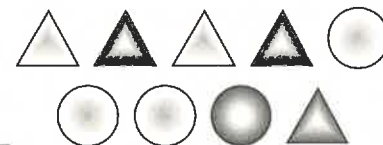
For 10–12, write the ratio.

10. weekdays to weekend days

_____

11. weekend days to days in a week

_____

12. days in a week to days in January

_____

Problem Solving REAL WORLD

13. The ratio of length to width in Gus's driveway is 13 yards to 4 yards. What is this ratio in feet? (Hint: 3 ft = 1 yd)

_____