## Understanding Ratios

A ratio is a pair of numbers that compares two quantities.
Count to find the ratio of squares to circles.

| $\downarrow$ |  | $\downarrow$ <br> 4 |
| :---: | :---: | :---: |
| to | 3 |  |

The ratio 4 to 3 can also be written as $4: 3$ or $\frac{4}{3}$.
The order of the numbers in a ratio is important.
$4: 3$ is the ratio of squares to circles.
$3: 4$ is the ratio of circles to squares.


Use the picture above for exercises 1 through 6. Write a ratio for each comparison in three ways.

1. The number of triangles to the total number of shapes

| $\downarrow$ |  |  |
| :--- | :--- | :--- |
| 1 | to | $\downarrow$ <br> 8 |

2. The number of squares to the number of triangles
3. The number of triangles to the number of squares
4. The number of triangles to the number of circles
5. The number of circles to the total number of shapes
6. The total number of shapes to the number of squares
7. There are 14 boys and 16 girls in Mr. Allen's class. What is the ratio of girls to the total number of students in the class? Write the ratio 3 ways.
8. Writing to Explain At a cat and dog hospital, 9 of the patients were cats, 17 were dogs. Use this fact to write two ratios.
Explain what each ratio means.
