## Ratios

A $\qquad$ is a comparison of two quantities by division.

The ratio of two red paper clips to six blue paperclips can be written in the following ways:

## 2 to 6 2:6 <br> $\frac{2}{6}$



Just like fractions, we usually represent a ratio in simplest form.

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## Example:

Several students named their favorite flavor of gum. Write the ratio that compares the number of students who chose fruit to the total number of students.

| Favorite Flavors of Gum |  |
| :---: | :---: |
| Flavor | \# of <br> Responses |
| Peppermint | 9 |
| Cinnamon | 8 |
| Fruit | 3 |
| Spearmint | 1 |

Fruit: 3
Total: $9+8+3+1$, or 21

The ratio is $\frac{1}{7}, 1$ to 7 , or $1: 7$.
So, 1 out of every 7 students preferred fruit-flavored gum.

## You Try:

Use the stars to answer questions 1 and 2.


1) Write the ratio of black stars to white stars in three different ways.
2) Write the ratio of white stars to black stars in three different ways.

Use the table below to answer questions 3-6.

| Favorite Pets |  |
| :---: | :---: |
| Snake | 15 |
| Dog | 10 |
| Cat | 6 |
| Hamster | 8 |
| Fish | 1 |


3) What is the ratio of people who chose snakes as their favorite pet to those who chose dogs?
4) What is the ratio of people who chose cats AND dogs to those who chose hamsters?
5) What is the ratio of those who chose snakes as their favorite pet to everyone that was surveyed?
6) What is the ratio of those who chose cats to those who chose fish?

