## Writing Ratios in Different Forms

1) Using the picture below, complete the table below with the type of ratio and the correct ratio using numbers.


|  | Type of Ratio <br> Part-to-Part, <br> Part-to-Whole, or <br> Whole-to-part | Ratio | Reduced <br> Form |
| :---: | :---: | :--- | :--- |
| Marios to Luigis |  |  |  |
| Characters to Luigis |  |  |  |
| Marios to Characters |  |  |  |
| Luigis to Marios |  |  |  |
| Characters to Marios |  |  |  |

2) What type of ratio can be written as a fraction? $\qquad$
a. Part to Part
b. Part to Whole
c. Whole to Part
3) Are these ratios equivalent? Start by writing each ratio and simplifying them.

12 birds to 60 animals
17 birds to 85 animals
Are they equivalent? Yes or No
4) Mary organized her room and found that she has $5 \mathrm{cds}, 2 \mathrm{dvds}$, and 12 books.

What is the ratio of books to CD's? $\qquad$
What is the ratio of books to DVD's? $\qquad$
Which one is larger? $\qquad$
5) There are 4 blue marbles, 10 red marbles, and 7 yellow marbles in a bag. What is the ratio of red to yellow marbles?
6) Zach's garage is full of sports equipment. He has 10 soccer balls and 2 footballs. What is the ratio of soccer balls to footballs?

Write in reduced form. $\qquad$
7) Harry Potter and The Sorcerer's Stone had 32 chapters in it. Violet has read 8 chapters so far. What is the ratio of chapters remaining to chapters read?

Write in reduced form.

## Equivalent Ratios

8) Are these ratios equivalent? Hint, you may need to reduce the ratios in order to decide if they are equal.

| $12: 8$ | and | $36: 32$ | Yes or No |
| :--- | :--- | :--- | :--- |
| 12 to 20 | and | 24 to 20 | Yes or No |
| $\frac{5}{9}$ | and | $\frac{40}{72}$ | Yes or No |
| $3: 5$ | and | $9: 16$ | Yes or No |

9) Reduce each ratio into simplest form.
10) Complete the tables below using equivalent ratios.


Ratios in the Real World
11) Red and pink balloons are in a box. The ratio of the red balloons to pink balloons is $5: 4$ if the box has 24 pink balloons, how many red balloons are there?
12) Thomas mixes lemonade mix and water in the ratio of $1: 15$, to get lemonade. He uses 2 ounces of lemonade mix.

How much water will he need?

How many ounces of lemonade will he get?

## Unit Rates

13) JD paid $\$ 75$ on eBay for 5 video games. How many games could he afford if he saves up $\$ 90$ ?
14) At strategy game club last Friday, students' played 3 games of Risk in 6 hours. How many games did they play per hour?
15) A car can go 147 miles on 7 gallons of gasoline (traveling with constant speed).
a. How far can the car go one 1 gallon of gas?
b. How far can the car travel on 18 gallons of gasoline?
16) Which is a better deal? Explain your reasoning.

Deal \#1 - 3 pack of paper towels at Aldi's for $\$ 2.59$
Or
Deal \#2 - 18 pack of paper towels at Costco for $\$ 15.98$

Challenge:
There are a total 63 Bikes. If the ratio of blue bikes to black
bikes is 4 to 5 and, how many of them are blue?


