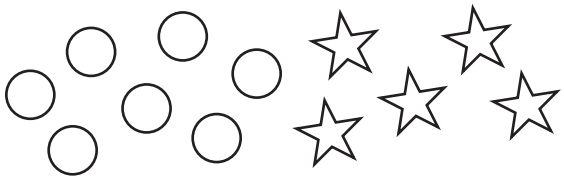
math Antics
Exercises

Name: _____

Date: _____

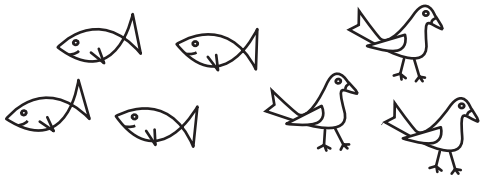
Ratios & Rates

1 What is the ratio of circles to stars? Use the ratio symbol (:) in your answer.



7 : 5

2 What is the ratio of birds to fish? Use the ratio symbol (:) in your answer.



3 : 4

3 If there are 7 girls and 8 boys on the school's track team, what is the ratio of girls to boys? Write your answer in three different ways.

$\frac{7}{8}$ 7 : 8 7 to 8

4 If a sports field is 100 meters long and 40 meters wide, what is the ratio of its width to its length? Write your answer in three different ways.

$\frac{40}{100}$ 40 : 100 40 to 100

or, in simplified form

$\frac{4}{10}$ 4 : 10 4 to 10

5 If a car travels 120 miles in 2 hours, what is its rate of speed expressed as a **unit rate**?

$\frac{120 \text{ mi}}{2 \text{ hr}} = \frac{60 \text{ mi}}{1 \text{ hr}}$

120 ÷ 2 = 60

6 If a plane travels 900 km in 3 hours, what is its rate of speed expressed as a **unit rate**?

$\frac{900 \text{ km}}{3 \text{ hr}} = \frac{300 \text{ km}}{1 \text{ hr}}$

900 ÷ 3 = 300

7 Tim has a job that pays $50 for 5 hours of work. Jane has a job that pays $24 for 2 hours of work. Who has the higher rate of pay? *(Hint: convert to unit rates)*

Tim: $\frac{50}{5} = \frac{10}{1}$ $10/hr

Jane: $\frac{24}{2} = \frac{12}{1}$ $12/hr

Jane's rate of pay is higher.

8 Jon can do 64 push-ups in 4 minutes. Paul can do 45 push-ups in 3 minutes. Whose rate is faster? *(Hint: convert to unit rates)*

Jon: $\frac{64}{4} = \frac{16}{1}$ 16 push-ups/min

Paul: $\frac{45}{3} = \frac{15}{1}$ 15 push-ups/min

Jon's rate is faster.

See Video for step-by-step solutions to each problem.