



Name: _____

Grade 5

NUMBER SENSE & NUMERATION: PROPORTIONAL REASONING

A **ratio** is a comparison of one number to another. The ratio used to show that Jamie read three books out of ten, would be 3:10.

1. Write each as a fraction. The first answer has been done for you. Reduce to lowest terms.

a) nine twelfths	$\frac{9}{12} = \frac{3}{4}$
b) four elevenths	
c) eight thirteenths	
d) five sevenths	
e) one sixth	
f) three twenty-thirds	
g) thirty-six twentieths	
h) forty thirty-first	

2. Write each as a ratio. The second answer has been given. Reduce to lowest terms.

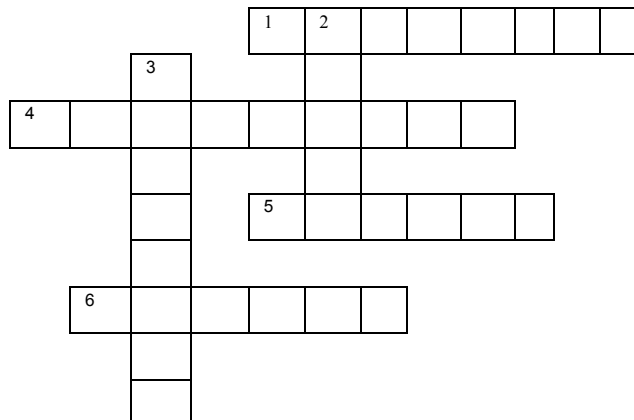


a) thirteen to fifteen	
b) thirty-three to eleven	33:11 = 3:1
c) thirteen to seventy-one	
d) fifty to twenty-two	
e) thirty-two to eleven	
f) twenty-one to nine	
g) forty-three to twenty-nine	
h) one hundred five to four hundred twenty	

Interesting

Fact

The ratio of the surface area of all the oceans to the surface area of the entire Earth is approximately 7:10.



3. Math Word Puzzle!

Clues:

Across

- A number like .
- Process of expressing a fraction in lowest terms.
- The number 1 followed by 100 zeros.
- Divide an angle into two equal angles.

Down

- A comparison of two numbers.
- A mathematical operation.

4. Don't forget to play Jigsaw Puzzle! Go to Mathfrog.ca for the link.

Expectation: i) demonstrate an understanding of proportional reasoning

5. Maria bought 25 candies. She spent \$1.25. Five minutes later she had only 15 candies left.



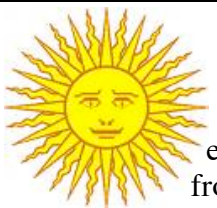
- What was the cost of each candy? _____
- What was the ratio of the number of candies eaten to the total numbers of candies? _____
- What was the reduced ratio of the number of candies left in the bag to the total number of candies? _____
- What was the ratio of candies eaten to candies left in the bag? _____

6. Andy and Dora helped their parents to plant a garden. In total, they planted 200 seeds. On Monday, they planted $\frac{1}{5}$ of the seeds. On Wednesday, they planted $\frac{1}{4}$ of the seeds. On Friday, they planted the rest.

- How many seeds did they plant on Friday? _____
- On which day did they plant most of the seeds? _____
- What was the ratio of the number of seeds planted on Wednesday to the number of seeds planted on Friday? _____
- What was the ratio of the number of seeds planted on Friday to the number of seeds planted on Monday? _____



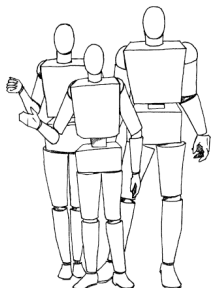
7. There are 4500 houses in Mathford. To save energy, 1700 houses use solar energy. The rest use electricity. This year, the number of houses that use solar energy increased by 2500. Find the ratio of the number of houses that use the solar energy to the number of houses that use electricity this year.



Did you know?

Solar energy is energy which comes from the sun.

Now Try This!



The ratio of the height of a human's head to the rest of the body is 1:6.
The height of Larry's head is 25 cm.
How tall is Larry?