

Two-Step Ratio Problems

A problem may not directly state both numbers that you need to set up a ratio. You may have to determine one of the numbers. Read the next example:

Example: On a test with 20 problems, Carla got 2 problems wrong. What was the ratio of the number of problems she got right to the total number of problems?

Step 1 Find the number of problems she got right. Subtract the number she got wrong, 2, from the total number of problems on the test, 20.

$$20 - 2 = 18$$

Step 2 Make a ratio of the number of problems she got right, 18, to the total number of problems, 20. Then reduce.

$$\frac{\text{right}}{\text{total}} = \frac{18}{20} = \frac{9}{10}$$