

Answer on Question #58604 – Math – Algebra

Question

Ramona completed a homework assignment consisting of 30 questions. If $\frac{3}{10}$ of her work was incorrect, how many questions did Ramona answer correctly?

Solution

Method 1

At first, we can find how many questions Ramona answered incorrectly:

$$30 \cdot \frac{3}{10} = 9.$$

Now, when we know number of incorrect answers, we can find how many questions Ramona answered correctly in the next way:

$$30 - 9 = 21.$$

Method 2

For every question there exists only two possibilities: either Ramona answered correctly or Ramona answered incorrectly.

If $\frac{3}{10}$ of her work was incorrect, then $1 - \frac{3}{10} = \frac{10-3}{10} = \frac{7}{10}$ of her work was correct.

Thus, Ramona answered correctly $30 \cdot \frac{7}{10} = 3 \cdot 7 = 21$ questions.

Answer: Ramona answered correctly 21 questions.