Worksheet 2015-8ℰF-00009(4)

NO CALCULATOR MAY BE USED IN THIS EXERCISE!

(1) Determine the area of a rectangle with the following dimensions 1,2 cm × 8,2 cm

(2) Carlo goes jogging for 5 days of the week to practise for an upcoming marathon. He jogged 26,56 ; 34,65 ; 12,45 ; 23,98 and 44,77 km respectively for the five days. Calculate the total distance that Carlo jogged for the five days.

(3) Are the following statements true or false?

(a) All natural numbers are rational numbers.

(b) $\sqrt{121}$ is not a rational number.

(c) -66 is an integer, but also a real number.

(d) The sum of any two natural numbers will always be a natural number.

(4) A mathematics textbook is 1,34 cm thick. On a table there are 36 textbooks stacked on each other. Determine the total thickness of all 36 textbooks.

(5) Which of the following solutions are correct? If the statement(s) is incorrect, correct it.

Solution 1:

$\frac{3}{4} \div 1\frac{1}{2} \times 5{,}5$

$= \frac{3}{4} \div \frac{3}{2} \times 5\frac{1}{2}$

$= \frac{3}{4} \times \frac{2}{3} \times \frac{11}{2}$

$= \frac{1}{2} \times \frac{11}{2}$

$= \frac{11}{4}$

$= 2\frac{3}{4}$

Solution 2:

$\frac{3}{4} \div 1\frac{1}{2} \times 5{,}5$

$= \frac{3}{4} \div \frac{3}{2} \times 5\frac{5}{10}$

$= \frac{3}{4} \div \left(\frac{3}{2} \times \frac{55}{10}\right)$

$= \frac{3}{4} \div \left(\frac{165}{20}\right)$

$= \frac{3}{4} \times \frac{20}{165}$

$= \frac{5}{55} = \frac{1}{11}$