

Answer on Question # 41598– Math - Geometry

A tape of 56 cm is divided into 2 segments whose lengths are at a ratio 3/5, which is the length of the segments?

Solution:

Let k be proportional coefficient, then the length of one segment is $3k$ and the length of the other one is $5k$. As the length of the whole tape is 56 cm, so we obtain

$$3k + 5k = 56$$

$$8k = 56$$

$$k = 7$$

Hence, the length of the shorter segment is $3 \cdot 7 = 21$ cm, and the length of the longer segment is $5 \cdot 7 = 35$ cm.

Answer. One segment is 21 cm, and the other one is 35 cm.