

Answer on Question#37414 - Math - Algebra

In estimating the cost of a pile of bricks measured as $2\text{m} \times 15\text{m} \times 1.2\text{m}$, the tape is stretched 1% beyond the standard length if the count is 450 bricks to 1m^3 and bricks cost \$100 per 1000, find the approximate error in the cost.

Solution

$$2 \times 15 \times 1.2 = 36 \text{ m}^3 \quad // \text{Only bricks}$$

$$36 \times 450 = 16200 \quad // \text{number of bricks}$$

$$100 \times 16200 / 1000 = 1620 \quad // \text{value of all bricks}$$

$$1620 \times 0.01 = 16.2\$ \quad // \text{ the approximate error in the cost.}$$