

Answer on Question #43913 – Math – Geometry

Question:

A room is 12 *m* by 10 *m*. Find the cost of covering its floor with bricks 20 *cm* by 6 *cm*, if the cost of one thousand bricks is Rs 300.

Solution:

The cost of one thousand bricks is Rs 300, hence one brick costs $\frac{300}{1000} = 0.3$ (Rs).

By formula of area of rectangle, the area of 1 brick is $0.2 \text{ m} \times 0.06 \text{ m} = 0.012 \text{ m}^2$. The area of the room is $12 \text{ m} \times 10 \text{ m} = 120 \text{ m}^2$. So, to cover the room's floor, we need $\frac{120}{0.012} = 10000$ bricks. Finally, 10000 bricks cost $0.3 \times 10000 = 3000$ (Rs).

Answer: Rs 3000.