

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.