

**Answer on Question #43915-Math-Geometry**

The cost of levelling a rectangular field at the rate of 85 paise per square meter is Rs 624.75. Find the perimeter of the field if its sides are in the ratio 5:3.

**Solution**

Let sides are  $5x$  and  $3x$ .

85 paise per square meter is  $\frac{85}{10000}$  paise per square centimeter.

The cost of leveling is

$$5x \cdot 3x \cdot \frac{85}{10000} = 624.75 \rightarrow x = 70 \text{ cm.}$$

Perimeter is

$$2(5x + 3x) = 2(350 + 210) = 1120 \text{ cm} = 11.2 \text{ m.}$$

**Answer: 11.2 m.**