

Mensuration I Ex 20.4 Q4

Answer:

In a right-angled triangle, the sides containing the right angles are of lengths 20.8~m and 14.7~m. Let the base be 20.8~m and the height be 14.7~m.

Then,

Area of a triangle = $\frac{1}{2} \times Base \times Height$

$$=\frac{1}{2}\times 20.8\times 14.7 = 152.88 \text{ m}^2$$

Mensuration I Ex 20.4 Q5

Answer:

For the first triangle, we have,

Base = 15 cm and altitude = 7 cm

Thus, area of a triangle = $\frac{1}{2} \times \text{Base} \times \text{Altitude}$

$$=\frac{1}{2}\times15\times7=52.5$$
 cm²

It is given that the area of the first triangle and the second triangle are equal.

Area of the second triangle = 52.5 cm²

One side of the second triangle = 10.5 cm

Therefore,

The other side of the second triangle = $\frac{2 \times Area}{One \ side}$ of a triangle

$$=\frac{2\times52.5}{10.5}=10$$
 cm

Hence, the other side of the second triangle will be 10 cm.

Mensuration I Ex 20.4 Q6

Answer:

We have,

Length of the rectangular field = 48 m

Breadth of the rectangular field = 20 m

Area of the rectangular field = Length x Breadth = 48 m x 20 m = 960 m²

Area of one right triangular flower bed = $\frac{1}{2} \times 12 \text{ m} \times 5 \text{ m} = 30 \text{ m}^2$ Therefore,

Required number of right triangular flower beds = $\frac{960 \text{ m}^2}{30 \text{ m}^2} = 32$

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