Mensuration Ex 20.2 Q7

Answer :

Given:
Perimeter = 50 cm
Length of the first side = 15 cm
Length of the second side = 20 cm
We have to find the length of the third side.
Perimeter of a triangle = Sum of all three sides of the triangle
$\therefore$ Length of the third side = (Perimeter of the triangle) − (Sum of the length of the other two sides)
= 50 − (15 + 20)
= 50 − 35 = 15 cm

Mensuration Ex 20.2 Q8

Answer :

It is given that a wire of length 20 m is to be folded in the form of a rectangle; therefore, we have:
Perimeter of the rectangle = 20 m
$\Rightarrow$ 2(Length + Breadth) = 20 m
$\Rightarrow$ (Length + Breadth) = 20/2 = 10 m

Since, length and breadth are positive integers in metres, therefore, the possible dimensions are:
(1m, 9m), (2m, 8m), (3m, 7m), (4m, 6m) and (5m, 5m)

Thus, five rectangles can be formed with the given wire.

Mensuration Ex 20.2 Q9

Answer :

Side of the square field = 100 m
Wire required to fence the square field = Perimeter of the square field = 4 × Side of the square field
Perimeter = 4 ×100 = 400 m
This perimeter is the length of wire required to fence one layer.
Therefore, the length of wire required to fence three layers = 3 × 400 m = 1200 m

Mensuration Ex 20.2 Q10

Answer :

Shikha and Priya, while running around the square and rectangular field respectively, actually cover a distance equal to the perimeters of these fields.
$\therefore$ Distance covered by Shikha = Perimeter of the square = 4 × 75 m = 300 m
Similarly, distance covered by Priya = Perimeter of the rectangle = 2 × (60 + 45) = 2 × 105 = 210 m
Thus, it is evident that the distance covered by Priya is less than that covered by Shikha.

Mensuration Ex 20.2 Q11

Answer :

Dimensions of the photograph = 30 cm × 20 cm
So, the required length of wooden frame = Perimeter of the photograph
= 2 (Length + Breadth)
= 2 × (30 + 20) cm
= 2 × 50 cm
= 100 cm

Mensuration Ex 20.2 Q12

Answer :

Length of the rectangular field = 100 m
Perimeter of the rectangular field = 300 m
Perimeter of a rectangle = 2 (Length + Breadth)
Applying the above formula, we get:
Breadth of the rectangular field = $\frac{Perimeter}{2} - Length = \frac{300}{2} - 100$ = 150 − 100 = 50 m

********** END **********