

A. Find the area of the shaded triangles, if the side of each small square is 1 cm.

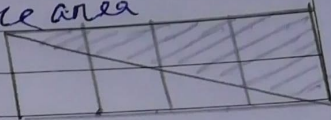
1. Area of the rectangle = 8 sq units = 8 sq cm

Area of the triangle = $\frac{1}{2}$ of the rectangle area

$$= \frac{1}{2} \times 8 \text{ sq cm}$$

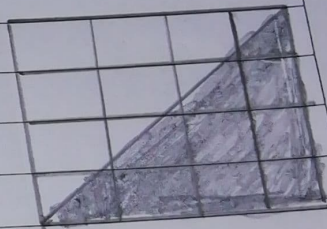
$$= \frac{8}{2} \text{ sq cm}$$

$$= 4 \text{ sq cm}$$



Ans. The required area of the triangle which is shaded is 4 sq cm.

2) Area of the given rectangle = 12 sq units = 12 sq cm



Area of the given shaded triangle = $\frac{1}{2}$ of the rectangle area

$$= \frac{1}{2} \times 12 \text{ sq cm}$$

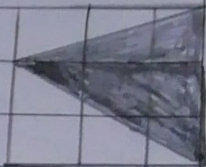
$$= \frac{12}{2} \text{ sq cm}$$

$$= 6 \text{ sq cm}$$

Ans. The required area of the shaded triangle is 6 sq cm.

3. To find the area of shaded triangle we divide the rectangle into two rectangles.

Rectangle A and Rectangle B



Area of Rectangle A is 3 sq cm

Area of triangle A = $\frac{1}{2}$ of area of Rectangle A

$$= \frac{1}{2} \times 3 \text{ sq cm}$$

$$= \frac{3}{2} \text{ sq cm} = 1\frac{1}{2} \text{ sq cm} = 1.5 \text{ sq cm}$$

Area of Rectangle B is 6 sq cm

Area of triangle B = $\frac{1}{2}$ of area of Rectangle B

$$= \frac{1}{2} \times 6 \text{ sq cm}$$

$$= \frac{6}{2} \text{ sq cm} = 3 \text{ sq cm}$$

Thus the area of required shaded triangle
 $= 3 \text{ sq cm} + 1.5 \text{ sq cm} = 4.5 \text{ sq cm}$

Ans. The area of the required shaded triangle is 4.5 sq cm.

4) To find the area of the shaded triangle

We divide the given rectangle into two rectangles.



Rectangle A and Rectangle B

Area of rectangle A is 8 sq cm

Area of triangle A = $\frac{1}{2}$ of area of rectangle A

$$= \frac{1}{2} \times 8 \text{ sq cm}$$

$$= 4 \text{ sq cm}$$

~~Area~~ Rectangle B

Area of Rectangle B is 4 sq cm

Area of triangle B = $\frac{1}{2}$ of area of rectangle B

$$= \frac{1}{2} \times 4 \text{ sq cm}$$

$$= 2 \text{ sq cm}$$

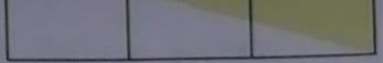
So the required area of the given triangle

$$\text{is Area of triangle A + Area of triangle B}$$

$$= 4 \text{ sq cm} + 2 \text{ sq cm}$$

$$= 6 \text{ sq cm}$$

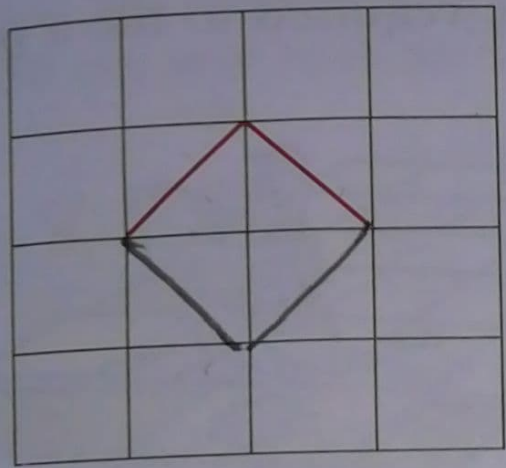
Ans. The required area of the shaded triangle is 6 sq cm .



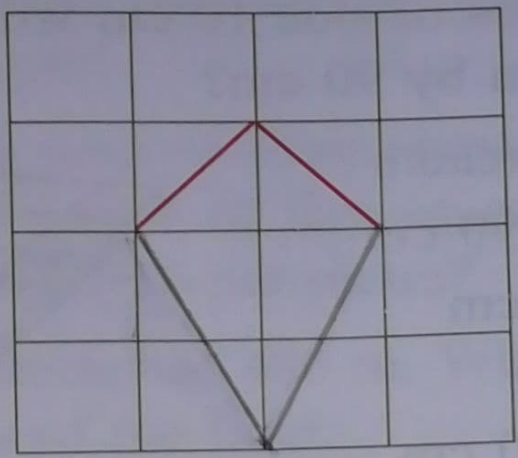
HOTS question

In each of the following, two sides are drawn. Draw two more sides to make a four-sided closed figure such that its area is

1. 2 sq. cm.



2. 3 sq. cm.



3. 10 sq. cm.

