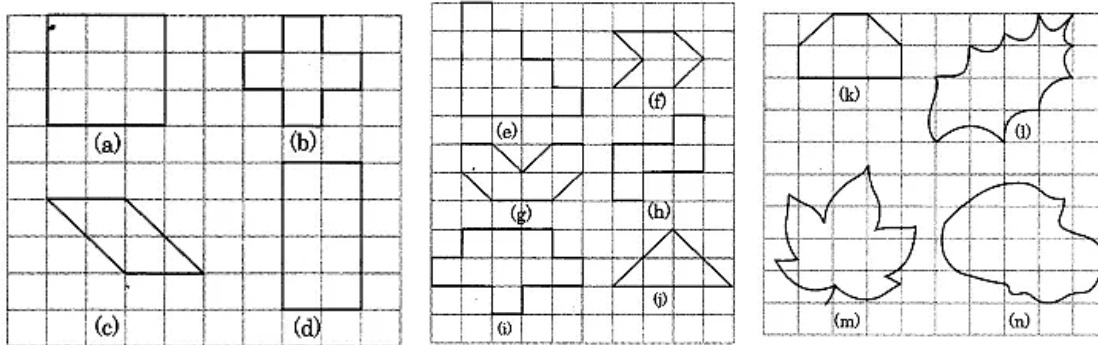


### Exercise 10.2

1. Find the areas of the following figures by counting squares:



**Ans.** (a) Number of full squares = 9

Area of 1 square = 1 sq unit

∴ Area of 9 squares =  $9 \times 1$  sq unit

= 9 sq units.

So, the area of the portion covered by 9 squares = 9 sq units

(b) Number of full squares = 5

∴ Area of the figure =  $5 \times 1$  sq unit = 5 sq units

(c) Number of full squares = 2

Number of half squares = 4

∴ Area of the covered figure =  $2 \times 1 + 4 \times \frac{1}{2} = 2 + 2$   
= 4 sq units

(d) Number of full squares = 8

∴ Area of the covered portion of the figure =  $8 \times 1$  sq unit

= 8 sq units.

(e) Number of full squares = 10

Area covered by the figure =  $10 \times 1$  sq unit = 10 sq units.

(f) Number of full squares = 2

Number of half squares = 4

$$\begin{aligned}\therefore \text{Area of the covered figure} &= (2 \times 1 + 4 \times \frac{1}{2}) \\ &= (2 + 2) \text{ sq units} = 4 \text{ sq units.}\end{aligned}$$

(g) Number of full squares = 4

Number of half squares = 4

$$\begin{aligned}\therefore \text{Area of the covered figure} &= (4 \times 1 + 4 \times \frac{1}{2}) \\ &= (4 + 2) \text{ sq units} = 6 \text{ sq units.}\end{aligned}$$

(h) Number of full squares = 5

$$\therefore \text{Area of the covered figure} = 5 \times 1 \text{ sq unit} = 5 \text{ sq units.}$$

(i) Number of full squares = 9

$$\begin{aligned}\therefore \text{Area of the covered figure} &= 9 \times 1 \text{ sq units} \\ &= 9 \text{ sq units.}\end{aligned}$$

(j) Number of full squares = 2

Number of half squares = 4

$$\begin{aligned}\therefore \text{Area of the covered figure} &= (2 \times 1 + 4 \times \frac{1}{2}) \text{ sq units} \\ &= (2 + 2) \text{ sq units} = 4 \text{ sq units.}\end{aligned}$$

(k) Number of full squares = 4

Number of half squares = 2

$$\begin{aligned}\therefore \text{Area of the covered figure} &= (4 \times 1 + 2 \times \frac{1}{2}) \text{ sq units} \\ &= (4 + 1) \text{ sq units} \\ &= 5 \text{ sq units}\end{aligned}$$

(l) Number of full squares = 4

Number of squares more than half = 3

Number of half squares = 2

$$\begin{aligned}\therefore \text{Area of the covered figure} &= (4 \times 1 + 3 \times 1 + 2 \times \frac{1}{2}) \text{ sq units} \\ &= (4 + 3 + 1) \text{ sq units} = 8 \text{ sq units.}\end{aligned}$$

(m) Number of full squares = 6

Number of more than half squares = 8

Area of the covered figure =  $(6 \times 1 + 8 \times 1)$  sq units

=  $(6 + 8)$  sq units

= 14 sq units.

(n) Number of full squares = 9

Number of more than half squares = 9

$\therefore$  Area of the covered figure

=  $(9 \times 1 + 9 \times 1)$  sq units

=  $(9 + 9)$  sq units = 18 sq units.