

Skill Set 15 – Square of Number (Patterns)

| Length of square | Area/ cm^2 |
|------------------------|---------------------|
| 3 | 9 |
| 4 | 16 |
| 5 | 25 |
| 6 | 36 |
| 7 | 49 |

(i): Find the area of a square with a length of 12 cm.

(ii): What is the length of a square with an area of 324 cm^2 ?

(i): The pattern shows is that of a perfect square.

Area of square with length of 12 cm = $12 \times 12 = 144 \text{ cm}^2$

(ii): To find the length of a square with an area of 324 cm^2 , the general pattern is,

(Length of Square) x (Length of Square)

By trial and error,

$$15 \times 15 = 225$$

$$20 \times 20 = 400$$

$$\mathbf{18 \times 18 = 324}$$

The length of a square with an area of 324 cm^2 is **18** cm.