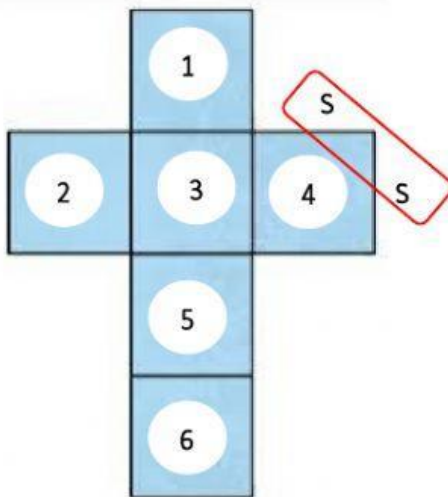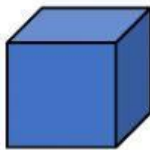# Find the missing side of
A Cube, given surface area

Steps to Success:

1. Read & highlight
2. Draw the net of a cube
3. Find the area of 1 square
4. Write the area in the net
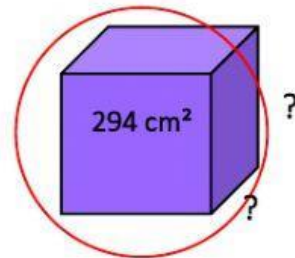5. Write the formula & solve

SA of Cube = (S x S) x 6

```
    1
2   3   4      S
    5          S
    6
```

Net of a cube

SA of Cube = (S x S) x 6

MISSING SIDE

Steps to Success:

1. Read & highlight
2. Write the formula

SA of Cube = (S x S) x 6

3. Fill in the info
4. Apply algebra
5. Find the **CUBE ROOT** √
6. Check

294 cm²   ?   ?

SA of Cube = (S x S) x 6

294 cm²   = (S x S) x 6

(S x S) x 6 = 294 cm²

(S x S) = 294 ÷ 6

(S x S) = 49

S² = 49

S = √49

= 7
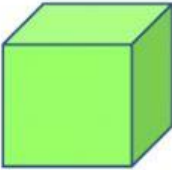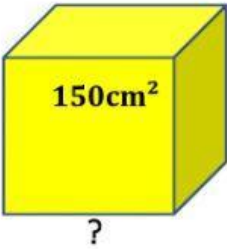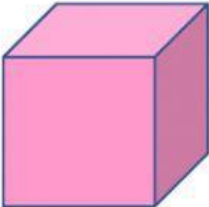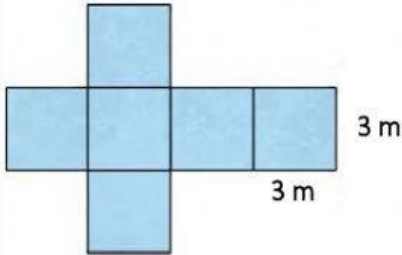
Check : (7 x 7) x 6 = 294cm²

Answer all questions. Each question carries 2 marks.

BIL	QUESTION	ANSWER & WORKING SPACE
1	Find the **Surface area of the cube** below: 9 m	Answer : _____ m²
2	Find the **missing side of a cube** with a total **surface area** of **150cm²** 150cm² ?	Answer : _____ cm
3	The total **surface area of a cube is 486cm²**. What is the **length of each side** of the **cube**?	Answer : _____ cm

BIL	QUESTION	ANSWER & WORKING SPACE
4	Find the **surface area** of the figure below: 3 m 3 m	Answer : _____ m^2
5	The total **surface area of a cube is 96cm²**. What is the **length of each side of the cube**?	Answer : _____ **cm**
6	The total **surface area of a cube is 600cm²**. What is the **length of each side of the cube**?	Answer : _____ **cm**