## **Quick Review**



➤ When you multiply a number by itself, you *square* the number.

The square of 5 is  $5 \times 5 = 25$ 

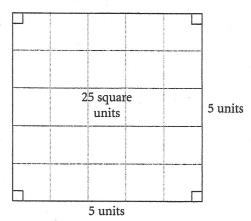
We write:  $5^2 = 5 \times 5 = 25$ 

We say: Five squared is twenty five.

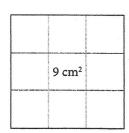
25 is a square number, or a perfect square.

➤ You can model a square number by drawing a square whose area is equal to the square number.

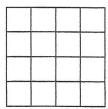
You can model 25 using a square with side length 5 units.



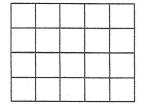
Find the perimeter of a square with area 9 cm<sup>2</sup>. First, find the side length of the square. Since  $3 \times 3 = 9$ , the side length is 3 cm. So, the perimeter is 3 cm + 3 cm + 3 cm + 3 cm = 12 cm



16 is a perfect square because you can create a square with area 16 square units using square tiles.



20 is not a perfect square because you cannot create a square with area 20 square units using square tiles. The 4 × 5 rectangle is the closest to a square that you can get.



## **Practice**

- 1. Match each diagram to the correct square number.
  - a)

i) 36

b)

ii) 81

c)

- iii) 16
- **2.** Complete the statement for each square number.
  - a) 64 is a square number because 64 = \_\_\_\_\_ × \_\_\_ = \_\_\_\_
  - **b)** 49 is a square number because 49 = \_\_\_\_\_ × \_\_\_ = \_\_\_\_
- 3. Complete the table. The first row has been done for you.

Cor	inplete the tal	ole. The motion and	16
a)	$4^2$	$4 \times 4$	+
b)	$3^2$	×	
c)	2	7 × 7	
d)	112	×	

- 4. Match the area of the square with the correct side length.
  - a) 25 cm<sup>2</sup>
- i) 2 cm
- **b)** 64 cm<sup>2</sup>
- ii) 10 cm

c) 4 cm<sup>2</sup>

- iii) 5 cm
- **d)** 100 cm<sup>2</sup>
- iv) 8 cm
- **5.** Use square tiles to decide whether 32 is a square number.

Which of the numb	pers are perfect squares? How do you know?
a) 81	81 is a perfect square because 81 = × =
b) 18	18 a perfect square because I draw a square with are 18 square units on grid paper.
20	
d) 25	
Find the side lengt	h of the square with each area. Give the unit.
a) 49 cm <sup>2</sup>	= = 49, so the length of the side is 7 cm.
<b>b)</b> 900 mm <sup>2</sup>	
c) 121 cm <sup>2</sup>	
d) 169 m <sup>2</sup>	
Find the perimeter	of each square.
a) side length 6 cm	n Perimeter = cm + cm + cm =
	Side length is m, because × = 25. So,
	Perimeter = =
c) area 144 m <sup>2</sup>	
	perfect square by a different perfect square, is the answer also a perfemples to explain your answer.
•	
	a) 81 b) 18 c) 20 d) 25 Find the side length a) 49 cm² b) 900 mm² c) 121 cm² d) 169 m² Find the perimeter a) side length 6 cm b) area 25 m² c) area 144 m² lif you multiply a

6. Use graph paper to decide whether 64 is a square number.