

At the end of this lesson, you should be able to:

- Recall squares and square roots of a number
- Calculate operations including squares and square roots
- Complete number sequence patterns in squares & square roots
- Solve problems on area and perimeter of squares

## SQUARES & SQUARE ROOTS OF A NUMBER

Let's consider the square of 3.

**SQUARE**

$$3^2 = 3 \times 3$$

**MULTIPLY 3  
TWO TIMES**

Therefore,  $3^2 =$  \_\_\_\_\_

Let's consider the square root of 16.

**SQUARE ROOT**

**FIND THE TWO SAME NUMBER THAT  
MULTIPLIES TOGETHER TO GIVE 16**

$$\sqrt{16} \rightarrow \square \times \square = 16$$

Therefore,  $\sqrt{16} =$  \_\_\_\_\_

Example: Evaluate the following:

a)  $5^2 + 7^2$

b)  ${}^2\sqrt{(9 + 7)}$

c)  ${}^2\sqrt{9} + 5$

Example: Complete the following number sequence

a) 1, 4, 9, \_\_\_\_\_, \_\_\_\_\_

b) 144, \_\_\_\_\_, \_\_\_\_\_, 81, 64

**SQUARES AND SQUARE ROOTS OF A NUMBER**  
**EXERCISE A**

NO	QUESTIONS	ANSWERS
1	Find the following without the use of a calculator a) $2^2 + 4^2$  b) $3^2 - 1^1$	a)
		b)
2	Find the following without the use of a calculator a) $\sqrt{25} - \sqrt{16}$  b) $\sqrt{9} - 2$  c) $\sqrt{36} + 2^2$	a)
		b)
		c)
3	Complete the number sequence below  1, 4, ____, ____, 25	
4	The area of a square is $36 \text{ cm}^2$ . Find the length of each of its side.	
5	The area of a square is $25 \text{ m}^2$ .  a. Find the length of each of its side.  b. Find its perimeter.	a)
		b)

**SQUARES AND SQUARE ROOTS OF A NUMBER**  
**EXERCISE B**

NO	QUESTIONS	ANSWERS
1	Find the following without the use of a calculator a) $8^2 + 9^2$  b) $11^2 - 7^2$	a)
		b)
2	Find the following without the use of a calculator a) $\sqrt{49} - \sqrt{36}$  b) $\sqrt{64} - 5$  c) $\sqrt{121} + 9^2$	a)
		b)
		c)
3	Complete the number sequence below  144, 121, 100, ____, ____,	
4	The area of a square is $36 \text{ cm}^2$ . Find the length of each of its side.	
5	The area of a square is $25 \text{ m}^2$ . Find its perimeter.	