

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

Numbers, Operations & Algebra

SQUARES & SQUARE ROOTS OF A NUMBER

Let's consider the square of 3.

SQUARE

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

**MULTIPLY 3
TWO TIMES**

Therefore, $3^2 = \underline{\hspace{2cm}}$

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, $\sqrt{16} = \underline{\hspace{2cm}}$

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, $\underline{\hspace{1cm}}$, $\underline{\hspace{1cm}}$

b) 144, $\underline{\hspace{1cm}}$, $\underline{\hspace{1cm}}$, 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 cm^2 . Find the length of each of its side.	
5	The area of a square is 25 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 cm^2 . Find the length of each of its side.	
5	The area of a square is 25 m^2 . Find its perimeter.	