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SQUARES AND SQUARE ROOTS

PERIOD 4

SUBJECT : MATHEMATICS
CHAPTER NUMBER: 3
CHAPTER NAME : SQUARES AND SQUARE ROOTS

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Learning outcome

Students will be able to understand the properties of square number.

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Properties of square numbers

https://www.youtube.com/watch?v=yMrXa_0TcDs (3:32)

Evaluation Questions

Ex 3C

1 .(v) Seeing the value of the digit at unit's place, state which of the following can be square of a number 50699

Sol: We know that a Square number can only end with digits 0, 1, 4, 5, 6, 9.

So, 50699 can be square of a number.

Question 7.

If the square of a number ends with 10 zeroes, how many zeroes will the number have?

Sol: The **number of zeros at the end** of a perfect **square** is always even.

2.(ii)

	23.06
2	531.7636
	4
43	131
	129
4606	2.7636
	2.7636
	x

Required square root =23.06

Question 5.

Which of the following numbers will have 6 at their unit's place :

(i) 262

(ii) 492

(iii) 342

(iv) 432

(v) 2442

Solution: The following numbers have 6 at their units place as $(4)^2 = 16$, $(6)^2 = 36$ has 6 at their units place 262, 342, 2442 i.e., (i), (iii) and (v)

Question 6.

If a number ends with 3 zeroes, how many zeroes will its square have?

Solution: We know that if a number ends with n zeros, then

its square will have 2n zeroes at their ends

A number ends with 3 zeroes, then its square will have $3 \times 2 = 6$ zeroes

Question 7.

If the square of a number ends with 10 zeroes, how many zeroes will the number have?

We know that if a number ends with n zeros

Then its square will have 2n zeroes Conversely,

if square of a number have 2n zeros at their ends then the number will have n zeroes

The square of a number ends 10 zeroes,

then the number will have $\frac{10}{2} = 5$ zeroes

Home assignment

Exercise 3(B) -1 to 6

1. **Find the side of a square, whose area is equal to the area of a rectangle with sides 6.4m and 2.5m.**
2. **Find the number of plants in each row, if 1024 plants are arranged, so that number of plants in a row is the same as the number of rows.**
3. **A hall has a capacity of 2704 seats. If the number of rows is equal to the number of seats in each row, then find the number of seats in each row.**

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THANKING YOU

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