# 薪 <br> OPTIMUM <br> INTERNATIONAL SCHOOL 

## CLASS -VIII

Maths
Date:-22/04/2020

## CHAPTER 3 - SOUARES AND SOUARE ROOTS

$>$ Watch the online videos "Squares and Square roots -Lecture 3, $4 \& 5$ " from Optimum Online E-Learning Platform and try to comprehend the concepts of Square and square root. After that try to solve the questions given in your assignment.
$>$ Lecture No. 03
$>$ Lecture No. 04
$>$ Lecture No. 05

1. Without adding, find the sum:
(i) $(1+3+5+7+9+11+13)$
(ii) $(1+3+5+7+9+11+13+15+17+19)$
(iii) $(1+3+5+7+9+11+13+15+17+19+21+23)$

2. (i) Express $\mathbf{8 1}$ as the sum of $\mathbf{9}$ odd numbers.
(ii) Express 100 as the sum of $\mathbf{1 0}$ odd numbers.
3. Write a Pythagorean triplet whose smallest member is
(i) 6
(ii) 14
(iii)16
(iv) 20
4. Evaluate:
(i) $(38)-(37)$ (ii)
$(75)^{2}-(74)^{2}$
(iii) $(92)^{2}-(91)^{2}$
(iv) $(105)^{2}-(104)^{2}$
(v) $(141)-(140)$
5. Using the formula $(a+b)=\left(a^{2}+2 a b+b^{2}\right)$, evaluate:
(i) (310) 2
(ii) (508) 2
(iii) (630) 2
6. Using the formula $\left.(a+b)=a^{2}-2 a b+b^{2}\right)$, evaluate: (i)
(196)
(ii) (689)
(iii) (891)
7. Evaluate:
(i) $69 \times 71$
(ii) $94 \times 106$
(iii) $88 \times 92$
(iv)78 $\times 82$
8. Fill in the blanks:
(i) The square of an even number is.
(ii) The square of an odd number is
(iii) The square of a proper fraction is $\qquad$ than the given fraction.
(iv) $=$ the sum of first $n$ natural numbers
9. Write (T) for true and (F) for false for each of the statements given below:
(i) The number of digits in a perfect square is even.
(ii) The square of a prime number is prime.
(iii) The sum of two perfect squares is a perfect squares.
(iv)The difference of two perfect squares is a perfect square.
(v) The product of two perfect squares is a perfect squares.
**Link of Optimum Online E-Learning Platform:- www.optimumschool.net/online In case of any query call at $\boldsymbol{+ 9 1 - 9 8 1 8 0 3 3 2 1 3}$

