PSBB LEARNING LEADERSHIP ACADEMY
BANGALORE

Class 8 Mathematics – Squares and Square roots WA -9 -27/08/2021

1) Using division method to find
   $[a]\sqrt{459684}$ $[b]\sqrt{27225}$ $[c]\ \sqrt{0.000081}$ $[d]\sqrt{4186.09}$
2) Solve
   $[a]\ \sqrt{\frac{98}{162}}$ $[b]\sqrt{2\frac{7}{9}}$ $[c]\sqrt{45}\ \times\sqrt{20}$ $[d]\ \sqrt{225}\ +\sqrt{14400}$
3) Evaluate: $\sqrt{286225}$ and use it to compute $\sqrt{2862.25}\ +\sqrt{28.6225}$
4) Find using prime factorisation
   $[a]\sqrt{5929}$ $[b]\sqrt{12769}$ $[c]\sqrt{14161}$ $[d]\sqrt{a^6}$
5) How many non -square numbers are there between 2500 and 2601?
6) A real estate owner had two plots, a square plot of side 39 m and a rectangular plot of dimensions 100 m length and 64 m breadth. He sells both of these plots and acquires a new square plot of the same area. What is the length of side of his new plot?
7) 225 square shaped mosaic tiles, each of area 1 square decimetre exactly cover a square shaped verandah. How long is each side of the square shaped verandah?
8) Find the smallest number by which 147 should be multiplied so that it becomes perfect square.
9) Find the least number to be added to 306452 to make it a perfect square.
10) Find the Pythagorean triplets if one of them is [a] 10 [b] 82
11) **Give 1 example for each of the following**
    a) Is the square of a prime number is prime?
    b) Will the sum of 2 perfect squares will always be a perfect square? What about their difference and product?
    c) The square of a natural number other than 1, is either a multiple of 3 or exceeds a multiple of 3 by 1.
12) Write each of the following numbers as difference of the square of two consecutive natural numbers.
    [a] 49 [b] 125

[HOTS]

13) Find the greatest 6 -digit number which is a perfect square.
14) Find $\sqrt{22+\sqrt{8+\sqrt{1}}}$
15) The area of a square field is 5184m^2. A rectangular field whose length is twice its breadth has its perimeter equal to the perimeter of the square field. Find the area of the rectangular field.

Square root day –3rd Mrach 2009 [3/3/09]

4TH April 2016 [4/4/16]

Guess which day will be the next

SQUARE ROOT DAY!!!!!!