



VIVEK TUTORIALS

Mathematics
Preliminary Examination
Max Marks: 20

Date : 07/Oct/2019

Grade: 9th (ICSE)
4A 4B

Time: 30Min

Question

1. Evaluate: 3
(i) $\left(\frac{7}{8}x + \frac{4}{5}y\right)^2$ (ii) $\left(\frac{2x}{7} - \frac{7y}{4}\right)^2$
2. The number x is 2 more than the number y. If the sum of the squares of x and y is 34; find the product of x and y. 3
3. If $a^2 + \frac{1}{a^2} = 47$ and $a \neq 0$; find : 3
(i) $a + \frac{1}{a}$ (ii) $a^3 + \frac{1}{a^3}$
4. The sum of two numbers is 9 and their product is 20. Find sum of their : (i) squares (ii) cubes. 3
- Question**
5. If $a^2 - 5a - 1 = 0$; find: 4
(i) $a - \frac{1}{a}$ (ii) $a + \frac{1}{a}$ (iii) $a^2 - \frac{1}{a^2}$
6. If $a^2 - 3a + 1 = 0$; find: 4
If $a^2 - 3a + 1 = 0$; find: (i) $a + \frac{1}{a}$ (ii) $a^2 + \frac{1}{a^2}$

----- All the Best -----