

1. If $\frac{37}{13} = 2 + \frac{1}{(x+1)(y+1/z)}$, where x, y, z are natural numbers

(a) 1,2,5 (b) 1,5,2 (c) 5,2,11 (d) 11,2,5

2. What is the least number which should be subtracted from 100 to get a perfect square?

(a) 0.000002 (b) 0.000004 (c) 0.02 (d) 0.04

3. The average age of 3 children in a family is 20% of the age of the mother. The total age of the mother and the youngest child is 40 years, what is the age of second child ?

(a) 15 years (b) 18 years (c) 20 years (d) Cannot be determined

4. Rajan got married 8 years ago. His present age is $\frac{6}{5}$ times that of his sister. His sister was 10 years younger to him at the time of marriage. How old is Rajan now?

(a) 32 years (b) 36 years (c) 38 years (d) 40 years

5. In an election between two candidates, one got 55% of the total valid votes, 20% of the votes were invalid. If the total number of votes was 7500, the number of valid votes for the winning candidate was:

(a) 2700 (b) 2900 (c) 3000 (d) 3100

6. A trader marked his goods at 20% above the cost price. One day he offered a discount of 20% on the marked price. His total gain is:

(a) 2% (b) 4.5% (c) 13.5% (d) 15%

7. Two friends P and Q started a business investing in the ratio 3:2. After 6 months, P invested an amount equal to that of Q's. At the end of the year, the profit was Rs. 98,000. What was the amount invested by P?

(a) Rs. 1,05,000 (b) Rs. 1,75,000 (c) Rs. 2,10,000 (d) Rs. 2,80,000

8. 10 men and 15 women together can complete a work in 6 days. If only men work, how many days will be required to complete the same work? If only women work, how many days will be required to complete the same work?

(a) 90 (b) 125 (c) 145 (d) 150 (e) None of these