



$$x^2 + y^2 = r^2$$

$$(x-h)^2 + (y-k)^2 = r^2$$

$$x^2 + y^2 + Ex + F = 0$$

$$I \left[\frac{d_1}{d_1 + d_2} \right]$$
$$I \left[\frac{N}{2} (n-1) \right]$$

Simple Equations

Solve the following equations for x

1) $6x - 27 + 3x = 4 + 9 - x$

A. 4 B. 5 C. 6 D. -4

2) $19(x + y) + 17 = 19(-x + y) - 21$

A. -1 B. -2 C. -3 D. -4

Solve the following equations for respective values of x and y

1) $3x+8y=30$ and $6x-y=9$

A.3,2 B.2,3 C.4,2 D.2,5

2) $2x+5y=20$ and $5x+6y=37$

A.15,-2 B.5,2 C.-5,6 D.2,5

Solve the following equations for y

1) $51x+49y=251$ and $49x+51y=249$

A.3 B.2 C.4 D.1

1) The cost of 16 pens and 8 pencils together is Rs.352 and the cost of 4 pens and 4 pencils together is Rs.96. Find the cost of each pen?

- A.32
- B.28
- C.36
- D.20

2)The cost of 2 chairs and 3 tables is Rs.1300.The cost of 3 chairs and 2 tables is Rs.1200.Then the cost of each table is more than that of each chair by_____

- A.50
- B.70
- C.60
- D.100

3)The denominator of a fraction is 1 less than twice the numerator. If the numerator and denominator are both increased by 1, then the fraction becomes $\frac{3}{5}$.Find the fraction?

- A. $\frac{2}{3}$
- B. $\frac{3}{5}$
- C. $\frac{4}{7}$
- D. $\frac{5}{9}$

4) Three times the first of three consecutive odd integers is 3 more than twice the third. The third integer is:

- A. 9
- B. 11
- C. 13
- D. 15

5) A two-digit number is such that the product of the digits is 8. When 18 is added to the number, then the digits are reversed. The number is:

- A. 18
- B. 24
- C. 42
- D. 81

6) The sum of the digits of a two-digit number is 15 and the difference between the digits is 3. What is the two-digit number?

- A. 69
- B. 78
- C. 96
- D. Cannot be determined
- E. None of these

7)The sum of ages of 5 children born at the intervals of 3 years each is 50 years. What is the age of the youngest child?

- A.4 Years**
- B.8 Years**
- C.10Years**
- D.12 Years**

8) Father is aged three times more than his son Ronit. After 8 years, he would be two and a half times of Ronit's age. After further 8 years, how many times would he be of Ronit's age?

- 2 times**
- 2.5 times**
- 3 times**
- 3.5 times**