

BHARATH COACHING CENTRE

7th cbse

Maths

Total: 40

Simple equations

Time: 45 mins

SECTION-A

$$1 \times 6 = 6$$

1. How many solutions can a linear equation with one variable have?
2. If $\frac{9}{5}$ of a number is 45, what is $\frac{1}{5}$ of the same number?
3. The solution of the equation $10 - 3y = 1$ then $y = ?$
4. The sum of five times a number is 45. what is the number?
5. Find x if $2x + 5 = 15$
6. If a and b are two negative numbers, then the value of ab will be...

SECTION-B

$$5 \times 2 = 10$$

1. Subtract 23 from thrice a number the results are 7. Find the number.
2. Thrice a number when decreased by one fourth gives 11. Find the number.
3. If $k + 7 = 10$, find the value of $9k - 50$.
4. Find the value of p if $p - \{-4 - (2 - 8 \div 4)\} = 8$
5. The sum of three consecutive numbers is 21. Find the numbers.

SECTION-C

$$4 \times 3 = 12$$

1. Divide Rs.1380 among Ahmed, John and Babita so that the amount Ahmed receives is 5 times as much as Babita's share and is 3 times as much as John's share.
2. Solve $\frac{x}{2} - \frac{1}{5} = \frac{x}{3} + \frac{1}{4}$

3. The present age of son is half the present age of his father. Ten years ago, the father was thrice as old as his son. What is their present age?
4. There are 112 trees in a park some of the trees were fruit trees. The number of non-fruit trees were four more than five times the number of fruit trees. What is the ratio of other number of fruit trees planted to the number of non-fruit trees in the park?

SECTION-D

$$3 \times 4 = 12$$

1. For a certain commodity, the demand equation giving demand 'd' in kg, for a price 'p' in dollars per kg is $d = 100(10 - p)$. The supply equation giving the supply 's' in kg for a price 'p' in dollars per kg is $s = 75(p - 3)$. Find the equilibrium price.
2. Solve $x - \frac{2x+8}{3} = \frac{1}{4}\left(x - \frac{2-x}{6}\right) - 3$
3. The distance between town A and B is 123km. two buses begin their journey from these towns and move directly towards each other. From town A, the bus is moving at a speed of 45 km per hour and from town B, the bus is moving at 67 km per hour. Assuming the buses start at the same time, find how far is their meeting point from town A.