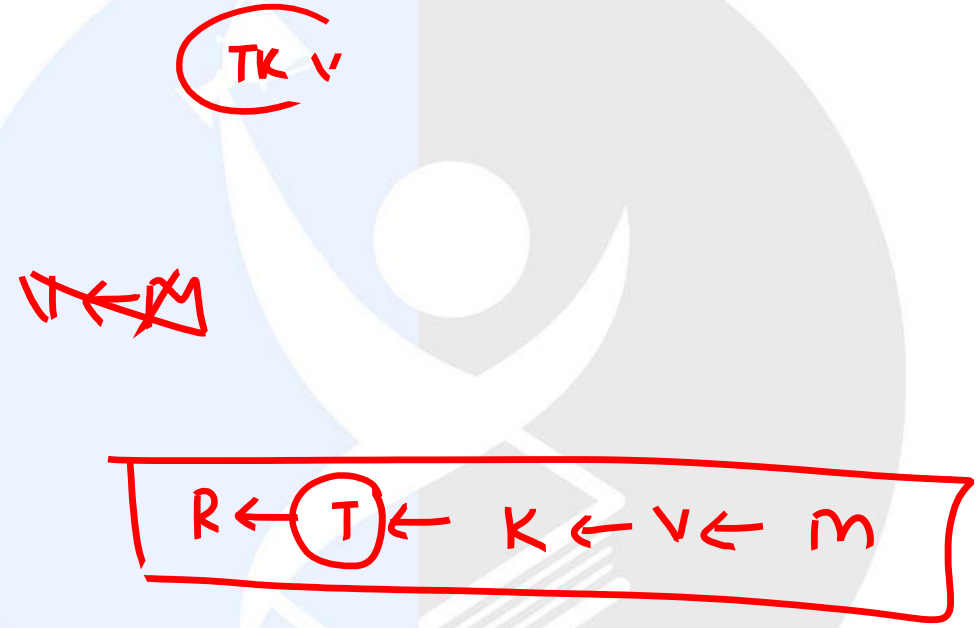
GENERAL APTITUDE

FIND THE VALUE ‘X’

Audio

Q In a race five drivers were in the following situation. M was following V, R was just ahead of T, and K was the only one between T and V. Who was in the second place at that instant?

(1) V (2) R (3) T (4) K



L, M and N are waiting in a queue meant for children to enter the zoo. There are 5children between L and M, and 8 children between M and N. If there are 3 children ahead of N and 21 children behind L, then what is the minimum number of children in the queue?

(A) 28 (B) 27 (C) 41 (D) 40

Ravi is taller than Arun but shorter than Iqbal. Sam is shorter than Ravi. Mohan is shorter than Arun. Balu is taller than Mohan and Sam. The tallest person can be:

(A) Mohan (B) Ravi (C) Balu (D) Arun

Ans

Iqbal > Ravi > Arun

P-1 B I > R > S > A > M

P-2 I > R > A > S > M

P-3 I > R > A > m > S

Balu Iqbal

Anwara, Bharati, Colin and Tarun commute by different modes of transport namely, Cycle (C), Autorickshaw (A), Bus (B) and Train (T). The initials of the mode of transport and the name of the person match in exactly two cases. If Tarun travels by Train, and Colin rides neither an Autorickshaw nor a Bus, then

(1) Anwara rides an Autorickshaw

(2) Anwara rides a Bus

(3) Bharati rides a Bus

(4) Bharati rides a Cycle

Three apartments, which are in a row, are occupied by Umar, Ramesh and John. Only one of them is the landlord, whose apartment is at one end. Ramesh's apartment is not next to John's apartment. The apartment on the left is not the landlord's, the one in the middle is not Ramesh's and the one on the right is not John's. Who is the landlord?

(1) Umar

(2) Ramesh

(3) John

(4) The above information is insufficient to identify the landlord.

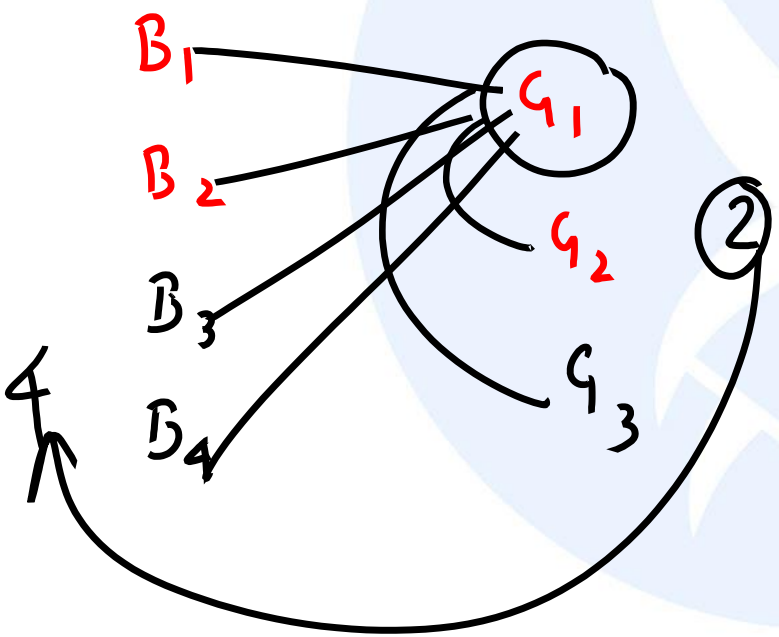
Ans

Among the children of a family, each boy has as many brothers as sisters but each girl has twice as many brothers as sisters. How many boys and girls are there in the family?

(1) 3 boys, 2 girls (2) 2 boys, 2 girls

(3) 4 boys, 3 girls (4) 4 boys, 2 girls

Ans

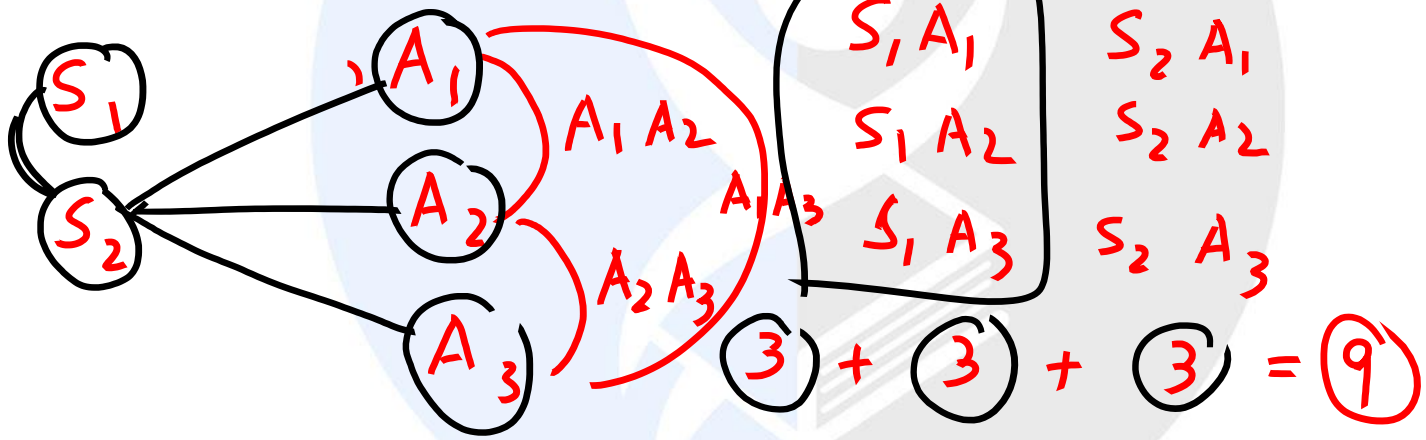


Q40 A cousin is a non-sibling with a common ancestor. If there is exactly one pair of siblings in a group of 5 persons then the maximum possible number of pairs of cousins in the group is

(1) 3 (2) 6 (3) 9 (4) 10

Ans (3)

5



Siblings → Real [Bro - Bro, Sis - Sis, Bro - Sis]

30 30 30

A new tyre can be used for at most 90 km. What is the maximum distance (in km) that can be covered by a three wheeled vehicle carrying one spare wheel, all four tyres being new?

(1) 180 (2) 90

(3) 120 (4) 270

Ans

	T_1	T_2	T_3	T_4
30	30	30	30	—
30	30	30	—	30
30	30	—	30	30
30		30	30	30

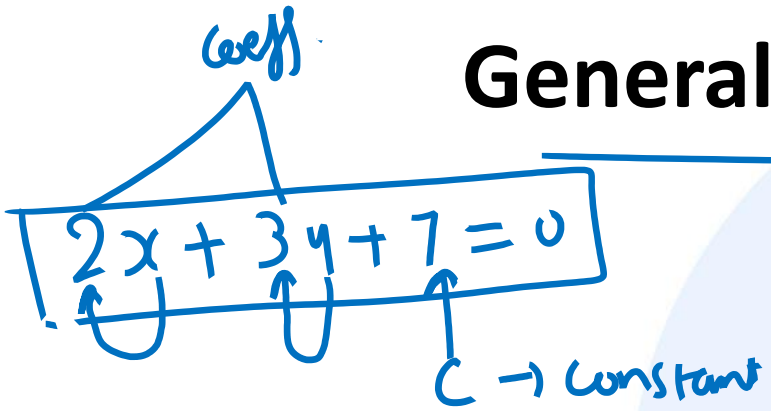
120 km

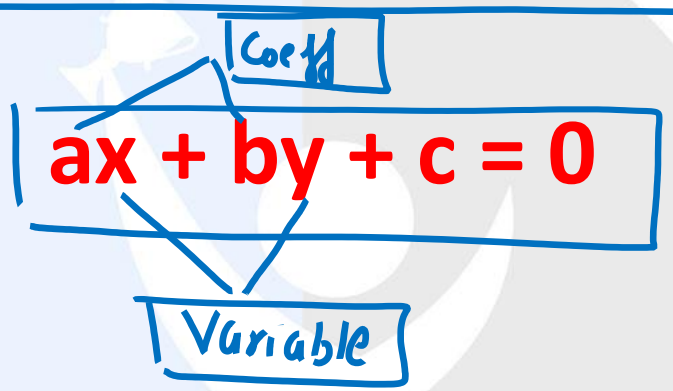
A ball is dropped from a height of 100 m. The ball after each bounce rises vertically by half its previous height (This means at the first bounce it rises by 50 m, by 25 m at the second bounce and so on). What is the vertical distance travelled by the ball between the first and the fifth bounces?

(1) 355/2 m (2) 365/2 m

(3) 375/2 m (4) 385/2 m

General form of a Linear Equation





Where a, b and c are the real numbers (a≠0 and b≠0) and x and y are the two variables, Here, a and b are the coefficients, and c is the equation's constant.

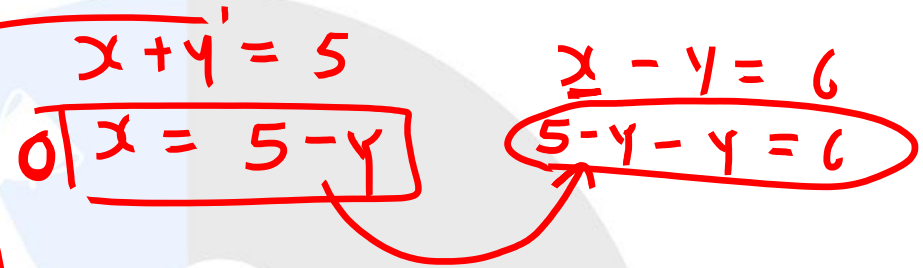
Pair of Linear Equations in two variable

$$a_1x + b_1y + c_1 = 0$$

$$a_2x + b_2y + c_2 = 0$$

Methods Of Solving

- Substitution Method
- Elimination Method
- Cross Multiplication Method



$x + 3y = 13$

$x + y = 7$

$x + 3 = 7$

$x = 4$

$x + 3y = 13$

$x + y = 7$ (−) (−) (−)

$2y = 6$

$y = \frac{6}{2} = 3$

$2a + b = -4$ ×3

$5a - 3b = 1$

$6a + 3b = -12$

$5a - 3b = 1$

$11a = -11$

$a = -1$

$2(-1) + b = -4$

$b = -4 + 2$

$b = -2$

$5x + 3y = 5$ — $\times 3$ ④

$3x - 4y = 32$ — $\times 5$ ③

$+20$

$3x - 4(-5) = 32$

$3x = 32 - 20$

$= \frac{12}{3} = 4 = x$

$15x + 9y = 15$

$15x - 20y = 160$

$(-) \quad (+) \quad (-)$

$29y = -145$

$y = \frac{-145}{29} = -5$

$y = -5$

$20x + 12y = 20$

$9x - 12y = 96$

$29x = 116$

$x = 4$

$y = -5$

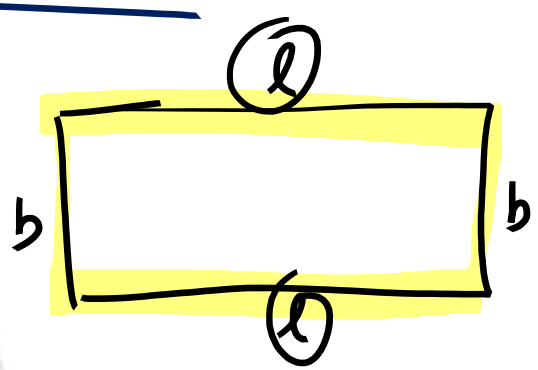
$2x+3y=46$ — $\times 3$

$3x+5y=74$ — $\times 2$

$$6x + 9y = 138$$
$$-\ 6x + 10y = 148$$
$$-y = -10$$
$$y = 10$$

$$2x + 30 = 46$$
$$x = \frac{16}{2}$$
$$x = 8$$

The perimeter of a rectangular garden is 20 m. If the length is 4 m more than the breadth, find the length and breadth (in meters) of the garden.



$2[l+b]$

1.
2.
3.
4.

$l - b = 4$

$2[l+b] = 20$

$l + b = 10$

$l - b = 4$

$2l = 14$

$l = 7$ m

$b = 7 - 4$

$b = 3$ m

$y = 27$ $x = 14$

The number of heads and legs of deer and human visitors at a deer park was counted at one point, and it was found that there were 41 *heads and* 136 legs. Calculate the number of deer and people who have visited the park.

1. 27,7
2. 27,14 Ans
3. 16,14
4. 14,10

$$x + y = 41$$
$$2x + 4y = 136$$
$$\cancel{2}[x + 2y] = \cancel{136}$$
$$x + 2y = 68$$
$$\cancel{x} + y = 41$$
$$\boxed{y = 27}$$

$$x + 27 = 41$$
$$x = 14$$

The sum of the numerator and denominator of a fraction is 3 less than twice the denominator. If the numerator and denominator are decreased by 1, the numerator becomes half the denominator. Determine the fraction.

1. 5/7
2. 4/7
3. 5/8
4. 6/11

HW-11

A book has 40 pages and each page has x lines. If the number of lines were reduced by 2 in each page, the number of pages would increase by 10 for the identical text. What is the value of x?

(1) 7 (2) 10 (3) 20 (4) 30

HW-12

THANK YOU

HAPPY LEARNING