

Pair of Linear Equations in Two Variables

Question 1.

Find the dimensions of a garden, whose length is 4 m more than its width and half the perimeter is 36 m.

- (a) $20 \text{ m} \times 16 \text{ m}$
- (b) $14 \text{ m} \times 10 \text{ m}$
- (c) $26 \text{ m} \times 22 \text{ m}$
- (d) $12 \text{ m} \times 8 \text{ m}$

Answer: (a) $20 \text{ m} \times 16 \text{ m}$

$$l = b + 4$$

$$l + b = 36$$

$$l = 20 \text{ and, } b = 6$$

Question 2.

The sides of a triangle are AB, BC and AC whose equations are respectively $y - 2 = 0$; $y = 3x - 7$ and $2y + x = 0$, The coordinates of points A and B are :

- (a) A(3,2), B(-4,2)
- (b) A(-4,2), B(3,2)
- (c) A(3,2), B(2,-1)
- (d) A(-4,2), B(2, -1)

Answer: (b) A(-4,2), B(3,2)

Equation of line AB : $y - 2 = 0$ Equation of line BC: $y = 3x - 7$ Equation of line AC: $2y + x = 0$

Coordinates of point B can be obtained by solving AB and BC $\Rightarrow (3,2)$.

Coordinate of point A are (-4, 2)

A (-4,2) and B(3,2)

Question 3.

Given is the system of Inconsistent equations, $2x + 7y = 11$ and $5x + ky - 25 = 0$, find k.

- (a) $-\frac{35}{2}$
- (b) 4

- (c) $\frac{35}{2}$
(d) -4

Answer: (c) $\frac{35}{2}$

$$\frac{a_1}{a_2} = \frac{b_1}{b_2} \neq \frac{c_1}{c_2}$$

$$\frac{2}{5} = \frac{7}{k}$$

$$2k = 35$$

$$k = \frac{35}{2}$$

Question 4.

10 students of class X took part in a Mathematics quiz. If the number of girls is 4 more than the number of boys, find the number of boys who took part in the quiz.

- (a) 3
(b) 7
(c) 2
(d) 8

Answer: (a) 3

No. of boys = x

and No. of girls = y

$$x + y = 10$$

$$y = x + 4$$

$$x = 3$$

$$y = 7$$

$$\Rightarrow \text{Number of boys} = 3$$

Question 5.

5 pencils and 7 pens together cost Rs. 50 whereas 7 pencils and 5 pens cost Rs. 46. Find the cost of 2 pencils and 3 pens.

- (a) Rs. 42
(b) Rs. 39
(c) Rs. 21
(d) Rs. 16

Answer: (c) Rs. 21

Let, cost of 1 pencil = x and cost of 1 pen = y – 2

$$\text{Cost of 2 pencil and 3 pens} = 6 + 15 = \text{Rs. 21}$$

\Rightarrow Correct option is (c)

Question 6.

A linear equation in two variables has:

- (a) 1 solution
- (b) 2 solutions
- (c) no solution
- (d) infinitely many

Answer: (d) infinitely many

A linear equation in two variables has infinite number of solutions.

=> Correct option is (d)

Question 7.

A pair of linear equations is not consistent if:

- (a) if has one solution
- (b) it has many solutions
- (c) graph intersect or coincide
- (d) graph is parallel

Answer: (d) graph is parallel

37. Correct option is (d)

Question 8.

In a $\triangle ABC$, $\angle A = x^\circ$, $\angle B = (3x - 2)^\circ$ and $\angle C = y^\circ$. Also, $\angle C - \angle B = 9^\circ$. Find the value of $\angle B$.

- (a) 73°
- (b) 82°
- (c) 25°
- (d) 49°

Answer: (a) 73°

$$\angle A + \angle B + \angle C = 180^\circ$$

$$\Rightarrow x + (3x - 2) + y = 180$$

$$4x + y = 182 \dots (1)$$

$$y - 3x + 2 = 9 \dots (2)$$

Solving (1) & (2), $y = 82$, $x = 25^\circ \Rightarrow \angle B = 73^\circ$

Question 9.

The perimeter of a rectangle is 44 cm. Its length exceeds twice its breadth by 4 cm. Find the area of the rectangle.

- (a) 46 cm^2
- (b) 49 cm^2

- (c) 96 cm^2
 (d) 69 cm^2

Answer: (c) 96 cm^2

Let, Length = $x \text{ cm}$

Breadth = $y \text{ cm}$

$$\Rightarrow 2(x + y) = 44$$

$$\Rightarrow x + y = 22, y = 6 \text{ cm}, x = 16 \text{ cm}$$

$$x = 2y + 4$$

$$\Rightarrow \text{Area} = 16 \times 6 = 96 \text{ cm}^2$$

Question 10.

For what value of k , will the equations, $x + 2y + (11 - k) = 0$ and $2x + ky + (10 + k) = 0$ represent the coincident lines :

- (a) $k = 12$
 (b) $k = 4$
 (c) $k = 36$
 (d) $k = 2$

Answer: (b) $k = 4$

$$\frac{a_1}{a_2} = \frac{b_1}{b_2} = \frac{c_1}{c_2}$$

$$\frac{1}{2} = \frac{2}{k} = \frac{11-k}{10+k}$$

$$k = 4$$

Question 11.

An equation $ax + by + c = 0$ is a linear equation in 2 variables, where a, b, c are :

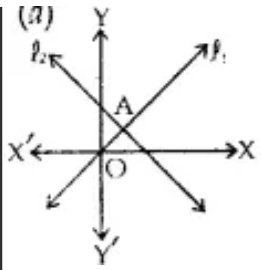
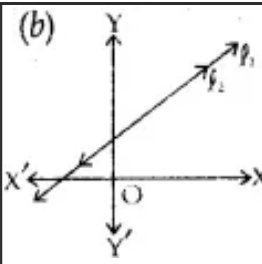
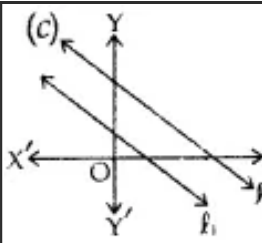
- (a) natural numbers
 (b) whole numbers
 (c) integers
 (d) real numbers

Answer: (d) real numbers

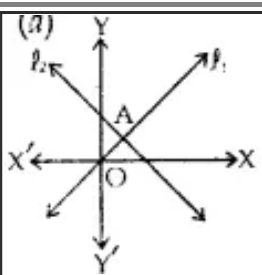
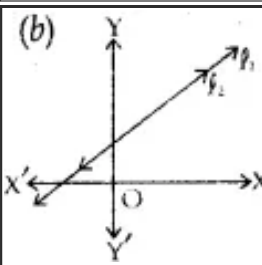
Question 12.

Read the following graphs carefully, and match the following:

	Lines do not intersect	Unique solutions	Consistent with many solutions
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(a) 			
(b) 	Lines intersect at 1 point	Infinite solutions	Consistent
(c) 	Lines are coincident	No solutions	Parallel lines

Answer:

(a) 	Lines intersect at 1 point	Unique solutions	Consistent
(b) 	Lines are coincident	Infinite solutions	Consistent with many solutions
	Lines do not intersect	No solutions	Parallel lines



Question 13.

The pair of equations $y = 9$ and $y = -7$ has:

- (a) one solution
- (b) two solutions
- (c) infinitely many
- (d) no solution solutions

Answer: (d) no solution solutions

$y = 9$ and $y = -7$ are lines parallel to X-axis, thus these are parallel lines and hence no solution

Question 14.

The system of equations $3x - 5y = 20$ and $6x - 10y = 40$ has :

- (a) one solution
- (b) exactly 2 solutions
- (c) infinitely many solutions
- (d) no solutions solutions

Answer: (c) infinitely many solutions

$$\frac{a1}{a2} = \frac{b1}{b2} = \frac{c1}{c2} = \frac{x}{y}$$

Question 15.

For what value of a, the pair of equations, $3x + 2y - 4 = 0$ and $ax - y - 3 = 0$ has a unique solutions :

- (a) All real numbers except $-\frac{3}{2}$
- (b) $a = -\frac{3}{2}$
- (c) $a = \frac{3}{2}$
- (d) $a = \frac{2}{3}$

Answer: (a) All real numbers except $-\frac{3}{2}$

For unique solutions , $\frac{a1}{a2} \neq \frac{b1}{b2}$

$$a \neq -\frac{3}{2}$$

a can all possible values except $-\frac{3}{2}$

Question 16.

The sum of a two digit number is 8. The number obtained by reversing the digits exceeds the number by 18. Then the given number is :

- (a) 53
- (b) 35
- (c) 26
- (d) 62

Answer: (b) 35

Let, the digit at units' place = x and digit at ten's place = y $\Rightarrow x + y = 8$ and $10x + y = 18 + (10y + x)$

No. = 35.

Question 17.

In a triangle, the sum of two angles is equal to the third angle. If the difference between two angles is 30° , find the angles.

- (a) $15^\circ, 45^\circ, 75^\circ$
- (b) $20^\circ, 50^\circ, 80^\circ$
- (c) $30^\circ, 60^\circ, 90^\circ$
- (d) $45^\circ, 45^\circ, 90^\circ$

Answer: (c) $30^\circ, 60^\circ, 90^\circ$

$$(x) + (y) + (x + y) = 180^\circ$$

$$x + y = 90^\circ$$

$$x - y = 30^\circ$$

$$\Rightarrow x = 60^\circ, y = 30^\circ$$

$$\Rightarrow \text{Angles are } 30^\circ, 60^\circ \text{ and } 90^\circ$$

Read the graph carefully and answer the questions given (Q.No. 18 to Q. No. 22):

Question 18.

- (a) (0,1)
- (b) (4,0)
- (c) (2,3)
- (d) (0,6)

Answer: (b) (4,0)
Correct option is (b).

Question 19.

The line $x - y + 1 = 0$ meets Y-axis at:

- (a) (0,1)
- (b) (4,0)
- (c) (2,3)
- (d) (0,6)

Answer: (a) (0,1)
Correct option is (a).

Question 20.

The solutions of the system of equations, $x - y + 1 = 0$, $3x + 2y - 12 = 0$ is :

- (a) (0,1)
- (b) (4,0)
- (c) (2,3)
- (d) (0,6)

Answer: (c) (2,3)
Since the two lines meet at (2, 3)
Correct option is (c).

Question 21.

The area of triangle formed by $x - y + 1 = 0$, $3x + 2y - 12 = 0$ and X-axis is :

- (a) $\frac{15}{2}$ sq. units
- (b) 9 sq. units
- (c) 5 sq. units
- (d) 6 sq. units

Answer: (a) $\frac{15}{2}$ sq. units

Area of Δ formed by $x - y + 1 = 0$, $3x + 2y - 12 = 0$ and X-axis is, (ΔABC)

$$\frac{1}{2} \times 5 \times 3 = \frac{15}{2} \text{ sq. units}$$

Question 22.

The area of triangle formed by $x - y + 1 = 0$, $3x + 2y - 12 = 0$ and $x = 0$ is :

- (a) $\frac{15}{2}$ sq. units
- (b) 9 sq. units

- (c) 5 sq. units
(d) 6 sq. units

Answer: (c) 5 sq. units

Area required = Area (ΔECD)

$$= \frac{15}{2} \times 5 \times 2 = 5 \text{ sq. units}$$

Question 23.

Find the value of $(x + y)$ if $148x + 231y = 527$ and $231x + 148y = 610$.

- (a) 3
(b) 480
(c) 1
(d) 481

Answer: (a) 3

Adding the given equations,

$$379x + 379y = 1137$$

$$x + y = 3$$

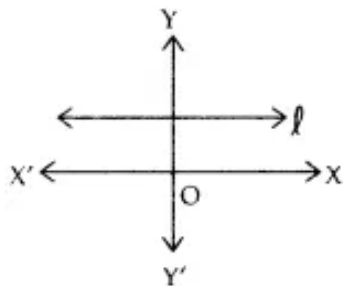
Question 24.

The line $x = 4$:

- (a) passes through origin
(b) parallel to X-axis
(c) parallel to Y-axis
(d) does not meet Y-axis at all

Answer: (c) parallel to Y-axis

$x = 4$ is a line parallel to Y-axis



Question 25.

If x and y satisfy the given two equations, $4x + \frac{6}{y} = 15$, $6x - \frac{8}{y} = 14$; find p is $y = px - 2$.

- (a) 1

- (b) 2
- (c) 3
- (d) $\frac{4}{3}$

Answer: (d) $\frac{4}{3}$

$$4x + \frac{6}{y} = 15$$

$$6x - \frac{8}{y} = 14$$

$$\Rightarrow x = 3$$

$$\Rightarrow y = 3x - 2$$

$$y = 2$$

$$\Rightarrow 2 = 3x - 2$$

\Rightarrow Correct option is (d).

Question 26.

Find the value which k cannot take, for the given system to have a unique solutions, $x + 2y = 3$, $ky + 5x + 7 = 0$.

- (a) 10
- (b) $\frac{-14}{3}$
- (c) any real
- (d) any real number
number except 10.

Answer: (a) 10

$$\frac{a_1}{a_2} = \frac{1}{5}, \frac{b_1}{b_2} = \frac{2}{k}, \frac{c_1}{c_2} = -\frac{3}{7}$$

$$\frac{a_1}{a_2} \neq \frac{b_1}{b_2}$$

$$k \neq 10$$

Question 27.

Find p and q so that given system has infinite number of solutions, $4x + 6y - 14 = 0$.

$$(p + q)x + (2p - q)y - 3(p + q + 1) = 0$$

- (a) $p = 1, q = 1$
- (b) $p = 1, q = -1$
- (c) $p = 1, q = 5$
- (d) $p = 5, q = 1$

Answer: (d) $p = 5, q = 1$

System will have infinite solutions, if

$$\frac{b_1}{b_2} = \frac{b_1}{b_2} = \frac{b_1}{b_2}$$

$$p - 5q = 0 \text{ and } p + q = 6$$

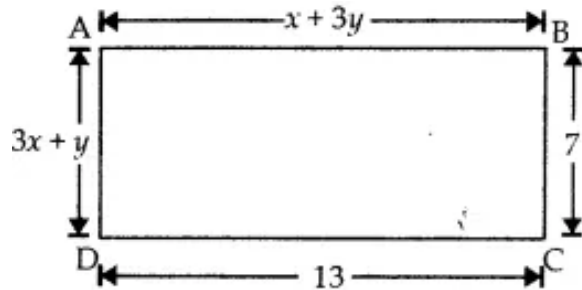
$$p = 5$$

$$q = 1$$

\Rightarrow Correct option is (d).

Question 28.

Find x and y in the given rectangle :



(a) $x = 1, y = 4$

(b) $x = 4, y = 1$

(c) $x = 2, y = 2$

(d) $x = 3, y = 1$

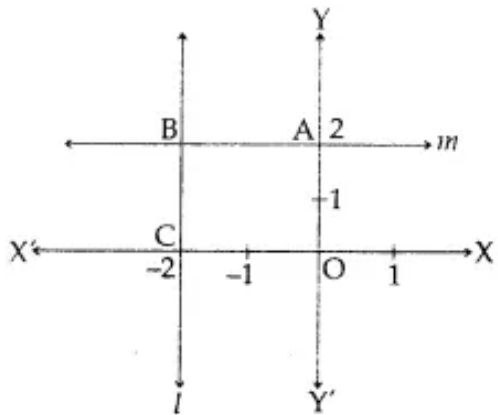
Answer: (a) $x = 1, y = 4$

$$3x + y = 7 \Rightarrow 3x + y = 7$$

$$x + 3y = 13 \Rightarrow 3x + 9y = 39$$

$$x = 1; y = 4$$

Read the figure carefully and answer the following questions (Q. No. 29 to Q. No. 33):



Question 29.

Equation of line l is,

(a) $x = -2$

(b) $x = 2$

(c) $y = 2$

(d) $y = -2$

Answer: (a) $x = -2$

Line l is parallel to Y-axis at a distance of 2 units in the negative direction

=> Equation of line / is $x = -2$

=> Correct option is (a).

Question 30.

Equation of line m is :

(a) $x = -2$

(b) $x = 2$

(c) $y = 2$

(d) $y = -2$

Answer: (c) $y = 2$

$y = 2$ => Correct option is (c).

Question 31.

The figure obtained by lines l, m, X-axis and Y-axis, can not be the :

(a) square

(b) rectangle

(c) trapezium

(d) triangle

Answer: (d) triangle

The figure obtained is square. Since every square is a rectangle and is a trapezium also.

Thus, the wrong name is triangle

=> Correct option is (d).

Question 32.

Area of figure OABC is (in square units):

(a) 1

(b) 2

(c) 3

(d) 4

Answer: (d) 4

Area of figure OABC = 4 square units

=> Correct option is (d).

Question 33.

Coordinates of A, B, C (in order) are:

- (a) (2,0), (2,-2) (0,-2)
- (b) (0,2), (-2,2), (-2,0)
- (c) (-2,0), (2,2), (0,-2)
- (d) (0,2), (2,2), (0,-2)

Answer: (b) (0,2), (-2,2), (-2,0)

A(0,2), B(-2,2), C(-2,0).

=> Correct option is (b).

Question 34.

Find the values of x and y if ABCD is a cyclic quadrilateral, $\angle A = 6x + 10^\circ$, $\angle B = (5x)^\circ$, $\angle C = (x + y)^\circ$ ($\angle D = (3y - 10)^\circ$).

- (a) $x = 30^\circ$, $y = 20^\circ$
- (b) $x = 20^\circ$, $y = 30^\circ$
- (c) $x = 40^\circ$, $y = 10^\circ$
- (d) $x = 10^\circ$, $y = 40^\circ$

Answer: (b) $x = 20^\circ$, $y = 30^\circ$

ABCD is cyclic

=> $\angle A + \angle C = 180^\circ$ and $\angle B + \angle D = 180^\circ$

=> $6x + 10 + x + y = 180^\circ$

=> $7x + y = 170^\circ$

$5x + 3y - 10 = 180^\circ$

=> $5x + 3y = 190^\circ$

$x = 20^\circ$, $y = 30^\circ$ => Correct option is (b)

Question 35.

If $x + 5y = 34$ and $x - 5y = -6$, find the value of $5y - 2x$.

- (a) - 8
- (b) 14
- (c) 8
- (d) 20

Answer: (a) - 8

$x + 5y = 34$

$x - 5y = -6$

$x = 14$

Solving these,

$x = 14$; $y = 4$

=> Correct option is (a).

Question 36.

Find the value of $\lambda = \frac{x}{y}$ if $bx - ay = a + b$ and $ax + by = a - b$.

- (a) 2
- (b) 1
- (c) 0
- (d) -1

Answer: (d) -1

$$ax + by = a - b$$

$$bx - ay = a + b$$

Solving these

$$x = 1$$

$$y = -1$$

$$\lambda = \frac{x}{y} = -1$$

Question 37.

The given system of equations,

$$-x + 2y + 2 = 0$$

$$\frac{1}{2}x - \frac{1}{4}y - 1 = 0, \text{ has :}$$

- (a) a unique solution
- (b) infinite solutions
- (c) no solution
- (d) 2 solutions

Answer: (a) a unique solution

$$\frac{a_1}{a_2} = \frac{-1}{1/2} = -2$$

$$\frac{b_1}{b_2} = \frac{2}{-1/4} = -8$$

since $\frac{a_1}{a_2} \neq \frac{b_1}{b_2}$ Given system of equations has a unique solution.

Question 38.

The pair of equations $x = a$ and $y = b$ graphically represents lines which are:

- (a) parallel
- (b) intersecting at (b, a)
- (c) intersecting at (a, b)
- (d) coincident

Answer: (c) intersecting at (a, b)

$x = a$ and $y = b$ graphically represents lines which are intersecting at (a, b)

=> Correct option is (c).

Question 39.

If $x = a$ and $y = b$ is the solution of the (a) coincident equations $\frac{4}{x} + 3y = 14$ and $\frac{3}{x} - 4y = 23$, then the values of a and b are respectively:

- (a) -2 and 5
- (b) 5 and -2
- (c) $\frac{1}{5}$ and -2
- (d) 5 and $-\frac{1}{2}$

Answer: (c) $\frac{1}{5}$ and -2

let, $\frac{1}{x} = u$

$$4u + 3y = 14$$

$$3u - 4y = 23$$

$$u = 5$$

$$y = -2$$

$$x = \frac{1}{5}$$

$$y = -2$$

Question 40.

One equation of a pair of dependent linear equations is $-5x + 7y = 2$. The second equation can be:

- (a) $10x + 14y + 4 = 0$
- (b) $-10x - 14y + 4 = 0$
- (c) $-10x + 14y + 4 = 0$
- (d) $10x - 14y = -4$

Answer: (d) $10x - 14y = -4$

$$\frac{a_1}{a_2} = \frac{b_1}{b_2} = \frac{c_1}{c_2}$$

Question 41.

The pair of equations $y = 0$ and $y = -7$ has :

- (a) no solution
- (b) infinitely many solutions
- (c) one solution
- (d) two solutions

Answer: (a) no solution

Question 42.

Which of the following is not a solution of pair of equations $3x - 2y = 4$ and $6x - 4y = 8$?

- (a) $x = 5, y = 3$
- (b) $x = 2, y = 1$
- (c) $x = 6, y = 7$
- (d) $x = 4, y = 4$

Answer: (a) $x = 5, y = 3$

Question 43.

The pair of equations $x = a$ and $y = b$ graphically represents lines which are

- (a) parallel
- (b) intersecting at (b, a)
- (c) coincident
- (d) intersecting at (a, b)

Answer: (d) intersecting at (a, b)

Question 44.

One equation of a pair of dependent linear equations is $-5x + 7y = 2$, the second equation can be :

- (a) $-10x + 14y + 4 = 0$
- (b) $-10x - 14x + 4 = 0$
- (c) $10x - 14y = -4$
- (d) $10x + 14y + 4 = 0$

Answer: (c) $10x - 14y = -4$

Question 45.

Two equations in two variables taken together are called

- (a) linear equations
- (b) quadratic equations
- (c) simultaneous equations
- (d) none of these

Answer: (c) simultaneous equations

Question 46.

8 girls and 12 boys can finish work in 10 days while 6 girls and 8 boys can finish it in 14 days. Find the time taken by the one girl alone that by one boy alone to finish the work.

- (a) 120, 130
- (b) 140, 280

- (c) 240,280
- (d) 100,120

Answer: (b) 140,280

Question 47.

The graph of $y = 4x$ is a line

- (a) parallel to x-axis
- (b) parallel to y-axis
- (c) perpendicular to y-axis
- (d) passing through the origin

Answer: (d) passing through the origin

Question 48.

If the pair of equation has no solution, then the pair of equation is :

- (a) inconsistent
- (b) coincident
- (c) consistent
- (d) none of these

Answer: (a) inconsistent

Question 49.

Find the value of 'a' for which the system of equations $ax + 2y - 4 = 0$ and $x - y - 3 = 0$ will represent intersecting lines?

- (a) $a \neq -2$
- (b) $a = -2$
- (c) $a = 2$
- (d) $a \neq 2$

Answer: (a) $a \neq -2$

Question 50.

The pair of equations $3x + 4y = k$, $9x + 12y = 6$ has infinitely many solutions if –

- (a) $k = 2$
- (b) $k = 6$
- (c) $k = 6$
- (d) $k = 3$

Answer: (a) $k = 2$

Question 51.

If a pair of linear equations is consistent, then the lines will be

- (a) always coincident
- (b) parallel
- (c) always intersecting
- (d) intersecting or coincident

Answer: (d) intersecting or coincident

Question 52.

Which of following is not a solution of $3a + b = 12$??

- (a) (3, 3)
- (b) (5, -3)
- (c) (4, 0)
- (d) (2, 4)

Answer: (d) (2, 4)

Question 53.

How many solutions of the equation $15x - 14y + 11 = 0$ are possible?

- (a) 2
- (b) No solution
- (c) 1
- (d) Infinite

Answer: (d) Infinite

Question 54.

The pair of equations $3x - 5y = 7$ and $-6x + 10y = 7$ have

- (a) a unique solution
- (b) infinitely many solutions
- (c) no solution
- (d) two solutions

Answer: (c) no solution

Question 55.

The graph of $y = 5$ is a line parallel to the

- (a) x-axis
- (b) y-axis
- (c) both axis
- (d) none of these

Answer: (a) x-axis

Question 56.

The value of k , for which equations $3x + 5y = 0$ and $kx + 10y = 0$ has a non-zero solution is

- (a) 6
- (b) 0
- (c) 2
- (d) 5

Answer: (a) 6

Question 57.

The present age of a father is the sum of the ages of his three sons. Ten years from now his age will be a three quarter of the sum of their ages then. How old is the father?

- (a) 50 years
- (b) 30 years
- (c) 40 years
- (d) 60 years

Answer: (a) 50 years

Question 58.

Find a and b for which $(a - 1)x + 3y = 2$, $6x + (1 - 2b)y = 6$ infinite solution.?

- (a) $a = -7$, $b = -4$
- (b) $a = -1$, $b = -4$
- (c) $a = 3$, $b = -1$
- (d) $a = 3$, $b = -4$

Answer: (d) $a = 3$, $b = -4$

Question 59.

The graph of $x = -2$ is a line parallel to the

- (a) x-axis

- (b) y-axis
- (c) both x- and y-axis
- (d) none of these

Answer: (b) y-axis

Question 60.

The graph of the equation $2x + 3y = 5$ is a

- (a) vertical line
- (b) straight line
- (c) horizontal line
- (d) none of these

Answer: (b) straight line

Question 61.

If $a \neq b$ then the system of equations $ax + by = c$, $lx + my = n$, has

- (a) a unique solution
- (b) no solution
- (c) infinitely many solutions
- (d) none of these

Answer: (a) a unique solution

Question 62.

Find the solution to the following system of linear equations:

$$2x - 5y + 4 = 0 \quad 2x + y - 8 = 0$$

- (a) (3,-2)
- (b) (2,3)
- (c) (-1,2)
- (d) (3,2)

Answer: (d) (3,2)

Question 63.

Which of the following pair of linear equations is inconsistent??

- (a) $2x + 3y = 7$; $4x + 6y = 5$
- (b) $x - 2y = 6$; $2x + 3y = 4$
- (c) $9x - 8y = 17$; $18x - 16y = 34$
- (d) $5x - 3y = 11$; $7x + 2y = 13$

Answer: (a) $2x + 3y = 7$; $4x + 6y = 5$

Question 64.

Find the solution to the following system of linear equations:

$$2p + 3q = 9 \quad p - q = 2?$$

- (a) (4,2)
- (b) (3,1)
- (c) (2,-3)
- (d) (-4,1)

Answer: (b) (3,1)

Question 65.

If $x = a$, $y = b$ is the solution of the equations $x + y = 5$ and $2x - 3y = 4$, then the values of a and b are respectively

- (a) 6, -1
- (b) 2, 3
- (c) 1, 4
- (d) $\frac{19}{5}$, $\frac{6}{5}$

Answer: (d) $\frac{19}{5}$, $\frac{6}{5}$

Question 66.

The pair of linear equations $2kx + 5y = 7$, $6x - 5y = 11$ has a unique solution if

- (a) $k = -3$
- (b) $k = 3$
- (c) $k = 5$
- (d) $k = -5$

Answer: (a) $k = -3$

Question 67.

The pair of equations $x = 0$ and $x = 5$ has

- (a) no solution
- (b) unique/one solution
- (c) two solutions
- (d) infinitely many solutions

Answer: (c) two solutions

Question 68.

If A : Homogeneous system of linear equations is always consistent. R : $x = 0, y = 0$ is always a solution of the homogeneous system of equations with unknowns x and y , then which of the following statement is true?

- (a) A is true and R is the correct explanation of A
- (b) A is false and R is not a correct explanation of A
- (c) A is true and R is false
- (d) A is false and R is true

Answer: (a) A is true and R is the correct explanation of A
