

CHAPTER: - 3	PAIR OF LINEAR EQUATION IN TWO VARIABLES
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Q1.	The value of K for which the system of equation $kx - y = 2$, and $6x - 2y = 3$ has a unique solution is.		
(A)	Not equal to 3	(B)	Not equal to (-3)
(C)	Not equal to 0	(D)	Not equal to (1)
Q2.	If the system of equations $kx - 5y = 2$ and $4x + my = 10$ has infinitely many solution then the value of k and m are.		
(A)	$k = \frac{4}{5}$ and $m = -25$	(B)	$k = \frac{5}{4}$ and $m = -25$
(C)	$k = \frac{5}{4}$ and $m = 25$	(D)	$k = \frac{-5}{4}$ and $m = 25$
Q3.	8 chairs and 5 tables cost Rs 10,500, while 5 chairs and 3 tables cost Rs 6,450. The cost of each chair will be.		
(A)	750	(B)	600
(C)	850	(D)	900
Q4.	The pair of linear equation $3x + 5y = 3$ and $6x + ky = 8$ do not have a solution, if k is		
(A)	5	(B)	10
(C)	15	(D)	20
Q5.	The pair of equation $x = a$ and $y = b$ graphically represents the lines which are.		
(A)	Parallel lines	(B)	Intersecting at (a, b)
(C)	Coincident lines	(D)	Intersecting at (b, a)
Q6.	The value of c for which the pair of equation $cx - y = 2$ and $6x - 2y = 3$ will have no solution.		
(A)	3	(B)	-3
(C)	-12	(D)	No value
Q7.	The pair of equation $5x - 15y = 8$ and $3x - 9y = \frac{24}{3}$ has.		
(A)	Infinite solution	(B)	Unique solution
(C)	No solution	(D)	Two solution
Q8.	$19x - 17y = 55$ and $17x - 19y = 53$ then the value of $(x - y)$ is.		
(A)	$\frac{1}{3}$	(B)	-3
(C)	3	(D)	5

Q9.	If $bx + ay = a^2 + b^2$ and $ax - by = 0$, then the value of $(x - y)$.		
(A)	$a - b$	(B)	$b - a$
(C)	$a^2 - b^2$	(D)	$b^2 + a^2$
Q10.	If $2x + 3y = 0$ and $4x - 3y = 0$ then the value of $(x + y)$ is .		
(A)	0	(B)	-1
(C)	1	(D)	2
Q11.	If $(6, k)$ is a solution of equation $3x + y - 22 = 0$ then the value of k is.		
(A)	4	(B)	- 4
(C)	3	(D)	- 3
Q12.	The father's age is six times his son's age. Four years hence, the age of the father will be four times his son's age. The present ages, in years, of the son and the father are, respectively.		
(A)	4 and 24	(B)	5 and 30
(C)	6 and 36	(D)	3 and 24
Q13.	Aruna has only Re 1 and Rs 2 coins with her. If the total number of coins that she has is 50 and the amount of money with her is Rs 75, then the number of Re 1 and Rs 2 coins are, respectively.		
(A)	35 and 15	(B)	35 and 20
(C)	15 and 35	(D)	25 and 25
Q14.	The sum of the digits of a two digit number is 9. If 27 is added to it, the digits of the numbers get reversed. The number is.		
(A)	36	(B)	72
(C)	63	(D)	25
Q15.	If $x = a$, $y = b$ is the solution of the equations $x - y = 2$ and $x + y = 4$, then the values of a and b are, respectively.		
(A)	3 and 5	(B)	5 and 3
(C)	3 and 1	(D)	-1 and -3
Q16.	The value of k for which the system of equations $x + 2y = 3$ and $5x + ky + 7 = 0$ has no solution is.		
(A)	10	(B)	6
(C)	3	(D)	1
Q17.	Sum of two numbers is 35 and their difference is 13, then the numbers are.		
(A)	24 and 12	(B)	24 and 11
(C)	12 and 11	(D)	None of these

Q18.	A two-digit number is 4 more than 6 times the sum of its digits. If 18 is subtracted from the number, the digits are reversed, then the number is.		
(A)	36	(B)	46
(C)	64	(D)	None of these
Q19.	Seven times a two-digit number is equal to four times the number obtained by reversing the order of its digit. If the difference between the digits is 3, then the number is.		
(A)	36	(B)	33
(C)	66	(D)	None of these
Q20.	Five years ago, A was thrice as old as B and ten years later A shall be twice as old as B, then the present age of A is.		
(A)	20	(B)	50
(C)	30	(D)	None of these
Q21.	If $2x - 3y = 7$ and $(a + b)x - (a + b - 3)y = 4a + b$ have an infinite number of solutions, then.		
(A)	$a = 5, b = 1$	(B)	$a = -5, b = 1$
(C)	$a = 5, b = -1$	(D)	$a = -5, b = -1$
Q22.	Rs. 4900 were divided among 150 children. If each girl gets Rs. 50 and a boy gets Rs. 25, then the number of boys is:		
(A)	100	(B)	102
(C)	104	(D)	105
Q23.	Two numbers are in the ratio 5:6 if 8 is subtracted from each of the numbers, the ratio becomes 4:5. The two numbers.		
(A)	10, 12	(B)	20, 24
(C)	30, 36	(D)	40, 48
Q24.	The solution of the linear pair $px + qy = p - q$ and $qx - py = p + q$ is .		
(A)	$x = 1, y = 1$	(B)	$x = 1, y = -1$
(C)	$x = -1, y = 1$	(D)	$x = -1, y = -1$
Q25.	If $2x - 3y = 7$ and $(a + b)x - (a + b - 3)y = 4a + b$ represent coincident lines, then a and b satisfy the equation		
(A)	$a + 5b = 0$	(B)	$5a + b = 0$
(C)	$a - 5b = 0$	(D)	$5a - b = 0$

Q26.	The perimeter of a rectangular garden is 180 metres. If the length of the garden is 10 metres more than its width, what will be the area of the garden ?		
(A)	40 m	(B)	50 m
(C)	50 sq m	(D)	2000 sq m
Q27.	If the system of equations $3x + y = 1$ and $(2k-1)x + (k-1)y = 2k+1$ is inconsistent, then k equals to.		
(A)	-1	(B)	0
(C)	1	(D)	2
Q28.	If one equation of a pair of dependent linear equations is $-3x + 5y - 2 = 0$. The second equation will be:		
(A)	$-6x + 10y - 4 = 0$	(B)	$6x - 10y - 4 = 0$
(C)	$6x + 10y - 4 = 0$	(D)	$-6x + 10y + 4 = 0$
Q29.	A fraction becomes $\frac{1}{3}$ when 1 is subtracted from the numerator and it becomes $\frac{1}{4}$ when 8 is added to its denominator. The fraction obtained is:		
(A)	$\frac{3}{12}$	(B)	$\frac{4}{12}$
(C)	$\frac{5}{12}$	(D)	$\frac{7}{12}$
Q30.	The angles of cyclic quadrilaterals ABCD are: $A = (6x+10)^\circ$, $B = (5x)^\circ$, $C = (x+y)^\circ$ and $D = (3y-10)^\circ$. The value of x and y is:		
(A)	$x = 20^\circ$ and $y = 10^\circ$	(B)	$x = 20^\circ$ and $y = 30^\circ$
(C)	$x = 44^\circ$ and $y = 15^\circ$	(D)	$x = 15^\circ$ and $y = 15^\circ$

ANSWERS

1	(A)	Not equal to 3	2	(A)	$k = \frac{4}{5}$ and $m = -25$	3	(A)	750
4	(B)	10	5	(B)	Intersecting at (a, b)	6	(A)	3
7	(C)	No solution	8	(C)	3	9	(B)	$b - a$
10	(A)	0	11	(A)	4	12	(C)	6 and 36
13	(D)	25 and 25	14	(A)	36	15	(C)	3 and 1
16	(A)	10	17	(B)	24 and 11	18	(C)	64
19	(A)	36	20	(B)	50	21	(D)	$a = -5, b = -1$
22	(C)	104	23	(D)	40, 48	24	(B)	$x = 1, y = -1$
25	(C)	$a - 5b = 0$	26	(D)	2000 Sq m	27	(D)	2
28	(A)	$-6x + 10y - 4 = 0$	29	(C)	$\frac{5}{12}$	30	(B)	$x = 20^\circ$ and $y = 30^\circ$