



INDIAN SCHOOL AL WADI AL KABIR

Class X, Mathematics

Worksheet- Pair of Linear Equations in Two Variables

06 - 04 - 2026

Q. No.	Questions of 1 Mark each. (MCQ's)							
1.	A pair of linear equations which has a unique solution $x = 2, y = -3$ is:							
	A	$x + y = -1; 2x - 3y = -5$	B	$2x + 5y = -11; 4x + 10y = -22$	C	$2x - y = 1; 3x + 2y = 0$	D	$x - 4y - 14 = 0; 5x - y - 13 = 0$
2.	The system of equations $2x + 1 = 0$ and $3y - 5 = 0$ has:							
	A	Unique solution	B	Two solutions	C	No solution	D	Infinite number of solutions
3.	If $2x + 3y = 0$ and $4x - 3y = 0$, then $x + y$ equals:							
	A	2	B	1	C	0	D	-1
4.	Given below are the three equations. The pair among the three equations having infinite number of solutions is: (CFQ)							
	i. $3x - y = 4$		ii. $6x + 2y = 8$		iii. $12x - 4y = 16$			
	A	i and ii	B	ii and iii	C	i and iii	D	none
5.	The lines representing the given pair of linear equations are non-intersecting. Which of the following statements is true?							
	A	$\frac{a1}{a2} = \frac{b1}{b2} = \frac{c1}{c2}$	B	$\frac{a1}{a2} = \frac{b1}{b2} \neq \frac{c1}{c2}$	C	$\frac{a1}{a2} \neq \frac{b1}{b2} = \frac{c1}{c2}$	D	$\frac{a1}{a2} \neq \frac{b1}{b2} \neq \frac{c1}{c2}$
6.	Asha has only ₹1 and ₹2 coins with her. If the total number of coins that she has is 50 and the amount of money with her is ₹75, then the number of ₹1 and ₹2 coins are, respectively:							
	A	35 and 15	B	15 and 35	C	35 and 20	D	25 and 25

7.	Solve for x and y: $27x + 31y = 85; \quad 31x + 27y = 89$							
	A	$x = -2, y = -1$	B	$x = 1, y = 2$	C	$x = 2, y = 1$	D	$x = -1, y = -2$
8.	The value of k for which the system of equations $3x - ky = 7$ and $6x + 10y = 3$ is inconsistent, is:							
	A	-10	B	5	C	-5	D	7
9.	The pair of linear equations $3x + 2y = 5$ and $2x - 3y = 7$ has:							
	A	Infinitely many solutions	B	A unique solution	C	Two solutions	D	No solutions
10.	The graph of $x = -3$ is a line parallel to:							
	A	y- axis	B	x - axis	C	both axes	D	none of these
11.	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 1	B	5 and 3	C	3 and 5	D	-1 and -3
12.	The pair of equations $y = 0$ and $y = -7$ has:							
	A	one solution	B	two solutions	C	infinitely many solutions	D	no solution
13	The area of the triangle formed by the line $\frac{x}{a} + \frac{y}{b} = 1$ with the coordinate axes is: (CFQ)							
	A	ab	B	$\frac{1}{2}ab$	C	$\frac{1}{4}ab$	D	$2ab$
	DIRECTION: In the following questions, a statement of assertion (A) is followed by statement of Reason (R) . Choose the correct option							
	(a) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A) (b) Both assertion (A) and reason (R) are true and reason (R) is not the correct explanation of assertion (A) (c) Assertion (A) is true but reason (R) is false. (d) Assertion (A) is false but reason (R) is true.							

14.	<p>Assertion (A): The pair of linear equations $px + 3y + 59 = 0$ and $2x + 6y + 118 = 0$ have infinitely many solutions if $p = 1$.</p> <p>Reason (R): The pair of linear equations $px + 3y + 19 = 0$ and $2x + 6y + 157 = 0$ has a unique solution, then $p \neq 1$.</p>
15.	<p>Assertion (A): The number of common solutions for the system of linear equations $5x + 4y = 6$ and $10x + 8y = 12$ is one.</p> <p>Reason (R): The graph of linear equations $a_1x + b_1y + c_1 = 0$ and $a_2x + b_2y + c_2 = 0$ gives a pair of intersecting lines if $\frac{a_1}{a_2} \neq \frac{b_1}{b_2}$.</p>

Answers

Answers	1	B	2	A	3	D	4	C
	5	B	6	D	7	C	8	C
	9	B	10	A	11	A	12	D
	13	B	14	b	15	d		