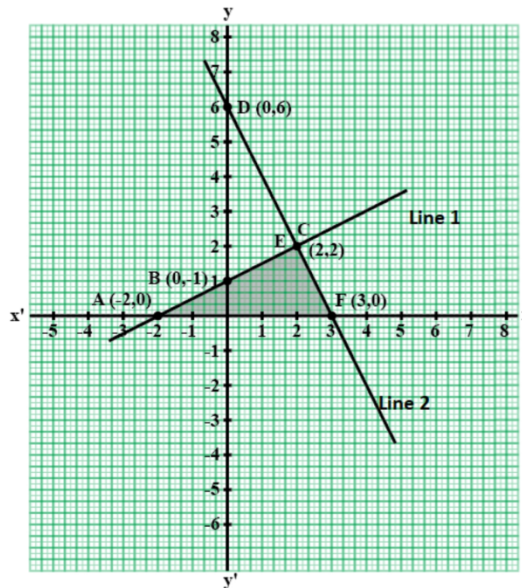




MATHEMATICS - 10TH

IMPORTANT MCQ'S - MATHS (10TH GRADE)



PAIR OF LINEAR EQUATIONS IN TWO VARIABLES



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Material Curated by
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Ex. Scientist , BARC Mumbai



10th - Maths

SN		Marks
1	Intersecting lines have _____ solution(s). (a) ZERO (b) ONLY ONE (c) INFINITELY MANY (d) NONE OF THE ABOVE	1
2	Coincident lines have _____ solution(s). (a) ZERO (b) ONLY ONE (c) INFINITELY MANY (d) NONE OF THE ABOVE	1
3	Parallel lines have _____ solution(s). (a) ZERO (b) ONLY ONE (c) INFINITELY MANY (d) NONE OF THE ABOVE	1
4	A pair of linear equations which has no solution, is called an _____ pair of linear equations. (a) CONSISTENT (b) INCONSISTENT	1
5	A pair of linear equations in two variables, which has a solution, is called a _____ pair of linear equations. (a) CONSISTENT (b) INCONSISTENT	1
6	If the lines are represented by the equation $a_1x + b_1y + c_1 = 0$ and $a_2x + b_2y + c_2 = 0$, then the lines are intersecting when _____. (a) $\frac{a_1}{a_2} = \frac{b_1}{b_2} = \frac{c_1}{c_2}$ (b) $\frac{a_1}{a_2} = \frac{b_1}{b_2} \neq \frac{c_1}{c_2}$ (c) $\frac{a_1}{a_2} \neq \frac{b_1}{b_2}$ (d) NONE OF THE ABOVE	2
7	If the lines are represented by the equation $a_1x + b_1y + c_1 = 0$ and $a_2x + b_2y + c_2 = 0$, then the lines are coinciding when _____. (a) $\frac{a_1}{a_2} = \frac{b_1}{b_2} = \frac{c_1}{c_2}$ (b) $\frac{a_1}{a_2} = \frac{b_1}{b_2} \neq \frac{c_1}{c_2}$ (c) $\frac{a_1}{a_2} \neq \frac{b_1}{b_2}$ (d) NONE OF THE ABOVE	2





8	<p>If the lines are represented by the equation $a_1x + b_1y + c_1 = 0$ and $a_2x + b_2y + c_2 = 0$, then the lines are parallel when _____.</p> <p>(a) $\frac{a_1}{a_2} = \frac{b_1}{b_2} = \frac{c_1}{c_2}$ (b) $\frac{a_1}{a_2} = \frac{b_1}{b_2} \neq \frac{c_1}{c_2}$</p> <p>(c) $\frac{a_1}{a_2} \neq \frac{b_1}{b_2}$ (d) NONE OF THE ABOVE</p>	2
9	<p>Graphically, find whether the following pair of equations has no solution, unique solution or infinitely many solutions: $5x - 8y + 1 = 0$; $3x - \frac{24}{5}y + \frac{3}{5} = 0$</p> <p>(a) NO SOLUTION (b) UNIQUE SOLUTION</p> <p>(c) INFINITELY MANY SOLUTIONS (d) NONE OF THE ABOVE</p>	3
10	<p>On comparing the ratios $\frac{a_1}{a_2}$, $\frac{b_1}{b_2}$ and $\frac{c_1}{c_2}$, find out whether the lines representing a pair of linear equations intersect at a point, are parallel or coincident: $5x - 4y + 8 = 0$; $7x + 6y - 9 = 0$</p> <p>(a) COINCIDENT (b) INTERSECTING</p> <p>(c) PARALLEL (d) NONE OF THE ABOVE</p>	2
11	<p>On comparing the ratios $\frac{a_1}{a_2}$, $\frac{b_1}{b_2}$ and $\frac{c_1}{c_2}$, find out whether the lines representing a pair of linear equations intersect at a point, are parallel or coincident: $9x + 3y + 12 = 0$; $18x + 6y + 24 = 0$</p> <p>(a) COINCIDENT (b) INTERSECTING</p> <p>(c) PARALLEL (d) NONE OF THE ABOVE</p>	2
12	<p>On comparing the ratios $\frac{a_1}{a_2}$, $\frac{b_1}{b_2}$ and $\frac{c_1}{c_2}$, find out whether the lines representing a pair of linear equations intersect at a point, are parallel or coincident: $6x - 3y + 10 = 0$; $2x - y + 9 = 0$</p> <p>(a) COINCIDENT (b) INTERSECTING</p> <p>(c) PARALLEL (d) NONE OF THE ABOVE</p>	2
13	<p>On comparing the ratios $\frac{a_1}{a_2}$, $\frac{b_1}{b_2}$ and $\frac{c_1}{c_2}$, find out whether the lines representing a pair of linear equations are consistent or inconsistent: $3x + 2y = 5$; $2x - 3y = 7$</p> <p>(a) CONSISTENT (b) INCONSISTENT</p>	2
14	<p>On comparing the ratios $\frac{a_1}{a_2}$, $\frac{b_1}{b_2}$ and $\frac{c_1}{c_2}$, find out whether the lines representing a pair of linear equations are consistent or inconsistent: $2x - 3y = 8$; $4x - 6y = 9$</p> <p>(a) CONSISTENT (b) INCONSISTENT</p>	2





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15	On comparing the ratios $\frac{a_1}{a_2}$, $\frac{b_1}{b_2}$ and $\frac{c_1}{c_2}$, find out whether the lines representing a pair of linear equations are consistent or inconsistent: $\frac{3}{2}x + \frac{5}{3}y = 7$; $9x - 10y = 14$ (a) CONSISTENT (b) INCONSISTENT	2
16	On comparing the ratios $\frac{a_1}{a_2}$, $\frac{b_1}{b_2}$ and $\frac{c_1}{c_2}$, find out whether the lines representing a pair of linear equations are consistent or inconsistent: $5x - 3y = 11$; $-10x + 6y = -22$ (a) CONSISTENT (b) INCONSISTENT	2
17	On comparing the ratios $\frac{a_1}{a_2}$, $\frac{b_1}{b_2}$ and $\frac{c_1}{c_2}$, find out whether the lines representing a pair of linear equations are consistent or inconsistent: $\frac{4}{3}x + 2y = 8$; $2x + 3y = 12$ (a) CONSISTENT (b) INCONSISTENT	2
18	Find out whether the lines representing a pair of linear equations are consistent or inconsistent: $x + y = 5$, $2x + 2y = 10$ (a) CONSISTENT (b) INCONSISTENT	2
19	Find out whether the lines representing a pair of linear equations are consistent or inconsistent: $x - y = 8$, $3x - 3y = 16$ (a) CONSISTENT (b) INCONSISTENT	2
20	Find out whether the lines representing a pair of linear equations are consistent or inconsistent: $2x + y - 6 = 0$, $4x - 2y - 4 = 0$ (a) CONSISTENT (b) INCONSISTENT	2
21	Find out whether the lines representing a pair of linear equations are consistent or inconsistent: $2x - 2y - 2 = 0$, $4x - 4y - 5 = 0$ (a) CONSISTENT (b) INCONSISTENT	2
22	Given the linear equation $2x + 3y - 8 = 0$, write another linear equation in two variables such that the geometrical representation of the pair so formed are intersecting lines. (a) $3x + 2y = 4$ (b) $6x + 9y = 4$ (c) $4x + 6y = 16$ (d) NONE OF THE ABOVE	2





23	<p>Given the linear equation $2x + 3y - 8 = 0$, write another linear equation in two variables such that the geometrical representation of the pair so formed are parallel lines.</p> <p>(a) $3x + 2y = 4$ (b) $2x + 3y = 4$</p> <p>(c) $5x + 6y = 16$ (d) NONE OF THE ABOVE</p>	2
24	<p>Given the linear equation $2x + 3y - 8 = 0$, write another linear equation in two variables such that the geometrical representation of the pair so formed are coincident lines.</p> <p>(a) $3x + 2y = 4$ (b) $2x + 3y = 4$</p> <p>(c) $4x + 6y = 16$ (d) NONE OF THE ABOVE</p>	2
25	<p>A pair of linear equations is _____ if it has a unique solution.</p> <p>(a) Inconsistent (b) Consistent</p> <p>(c) Dependent (d) BOTH (B) and (C)</p>	1
26	<p>In case of infinitely many solutions, the pair of linear equations is said to be _____.</p> <p>(a) Inconsistent (b) Consistent</p> <p>(c) Dependent (d) BOTH (B) and (C)</p>	1
27	<p>Find whether the following pair of equations are consistent or not: $3x + y + 4 = 0$, $6x - 2y + 4 = 0$.</p> <p>(a) Consistent (b) Inconsistent</p>	2
28	<p>Find whether the following pair of equations are consistent or not: $x - 2y = 6$, $3x - 6y = 0$.</p> <p>(a) Consistent (b) Inconsistent</p>	2
29	<p>Find whether the following pair of equations are consistent or not: $x + y = 3$, $3x + 3y = 9$.</p> <p>(a) Consistent (b) Inconsistent</p>	2
30	<p>Find the area of the figure formed by these lines $x = -2$ and $y = 3$, the x-axis and the y-axis.</p> <p>(a) 3 sq units (b) 6 sq units</p> <p>(c) 12 sq units (d) 24 sq units</p>	5
31	<p>Solve the system of equations $3x + 2y = 4$ and $2x - 3y = 7$ graphically .</p>	2





	<p>(a) $x = -2$; $y = 1$</p> <p>(c) $x = 2$; $y = 1$</p>	<p>(b) $x = 2$; $y = -1$</p> <p>(d) $x = -2$; $y = -1$</p>	
32	<p>Solve the system of equations $2x + 3y = 8$ and $x - 2y + 3 = 0$ graphically .</p> <p>(a) $x = -1$; $y = 2$</p> <p>(c) $x = 2$; $y = 1$</p>	<p>(b) $x = 1$; $y = -2$</p> <p>(d) $x = 1$; $y = 2$</p>	2
33	<p>Are the following pair of linear equations consistent? $\frac{3}{5}x - y = \frac{1}{2}$ and $\frac{1}{5}x - 3y = \frac{1}{6}$.</p> <p>(a) Yes</p>	<p>(b) No</p>	2
34	<p>The line represented by $x = 7$ is parallel to the x-axis. Is the statement is true or false?</p> <p>(a) TRUE</p>	<p>(b) FALSE</p>	2
35	<p>Solve the following system of equations: $x + y = 3$; $2x + 5y = 12$</p> <p>(a) $x = -1$, $y = -2$</p> <p>(c) $x = 1$, $y = -2$</p>	<p>(b) $x = 1$, $y = 2$</p> <p>(d) No solution</p>	2
36	<p>Does the following system of linear equations has a unique solution ? $2x - 3y = 6$, $x + y = 1$</p> <p>(a) No</p>	<p>(b) Yes</p>	1



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- Trained More then 1 lakh students online and Offline - Bilaspur, Bhilai, Delhi



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Selected in NTPC

P Chaitanya
Selected in IIT-Bombay,
Placed in Micron



Prakhar Jain
Selected in IISc Bangalore,
Placed in Samsung

सीयू के छात्र मनु व मनीष का इंटेल कंपनी में चयन, 21 लाख सालाना पैकेज



बिलासपुर छात्र मनु कश्यप और मनीष कुमार सिंह का चयन इंटेल प्राइवेट लिमिटेड के लिए हुआ है। कंपनी इन छात्रों को सालाना 21 लाख रुपए का पैकेज दे रही है। ये दोनों छात्र सत्र 2017 में सीयू के इलेक्ट्रॉनिक्स एंड कम्युनिकेशन इंजीनियरिंग विभाग से बोटिक की उपाधि प्राप्त की। वर्तमान में ये भारतीय प्रौद्योगिकी संस्थान (आईआईटी) दिल्ली में एमटेक कर रहे हैं। इंटेल कॉर्पोरेशन एक अमेरिकी बहुराष्ट्रीय कंपनी है। सिलिकॉन वैली में सांता क्लारा स्थित इस कंपनी का भारत में मुख्यालय बंगलुरु है।

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MATHEMATICS - 10TH

IMPORTANT MCQ'S - MATHS (10TH GRADE)

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1	2	3	4	5	6	7	8
B	C	A	B	A	C	A	B
9	10	11	12	13	14	15	16
C	B	A	C	A	B	A	A
17	18	19	20	21	22	23	24
A	A	B	A	B	A	B	C
25	26	27	28	29	30	31	32
B	D	A	B	A	B	B	D
33	34	35	36	37	38	39	40
A	B	B	B	-	-	-	-
41	42	43	44	45	46	47	48
-	-	-	-	-	-	-	-