EduSahara™ Learning Center Assignment

Grade : Class IX, CBSE
Chapter : Linear Equations in two Variables
Name : Linear Equations Concepts

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1. Which of the following is a linear equation in two variable?

(i) $(40x^2 + 77x + 9) = 0$

(ii) $(-20x^2 - 21xy - 5x - 4y^2 + 7y + 15) = 0$

(iii) $(3x + 6y + 4) = 0$

(iv) $(-7x + 3) = 0$

(v) $(2x + 2y - 6z + 7) = 0$

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2. Which of the following is a linear equation in two variable?

(i) $(-9x - 6y + 2z - 9) = (-6x + 9y - 6z + 1)$

(ii) $(5x + 3y + 3) = (8x - 7y - 2)$

(iii) $(-45x^2 - 57xy + 32x - 18y^2 + 24y + 64) = 0$

(iv) $(35x^2 + 91x + 56) = (8x + 9)$

(v) $(-4x - 9) = (-5x - 8)$

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3. The linear equation $(-9x + 8y - 2) = (2x - 8y - 5)$ is equivalent to

(i) $(-9x + 8y - 2) = (2x - 5y - 5)$

(ii) $(-11x + 16y + 3) = 0$

(iii) $(-10x + 16y + 3) = 0$

(iv) $(-12x + 16y + 3) = 0$

(v) $(-9x + 8y - 2) = (2x - 10y - 5)$

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4. The value of x in terms of other variables and constant in $(-6x - 9y + 2) = (-5x - 8y - 1)$ is

(i) $x = (-y + 6)$ (ii) $x = (-y + 3)$ (iii) $x = 3$

(iv) $x = (-2y + 3)$ (v) $x = (-y + 1)$

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5. The value of y in terms of other variables and constant in $(9x + 7y + 6) = (-6x - 4y - 1)$ is

(i) $y = (-\frac{13}{9}x - \frac{7}{11})$ (ii) $y = (-\frac{15}{11}x - \frac{5}{11})$ (iii) $y = (-\frac{15}{11}x - \frac{9}{11})$

(iv) $y = (-\frac{15}{11}x - \frac{7}{11})$ (v) $y = (-\frac{17}{13}x - \frac{7}{11})$

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6. Find the set of points satisfying the equation $(-12x - y + 67) = 0$

(i) $((-2), 91), ((-1), 79), (0, 67), (0, 56), (2, 43)$

(ii) $((-2), 91), ((-1), 79), (0, 67), (1, 55), (4, 45)$

(iii) $((-2), 91), ((-1), 79), (0, 67), (1, 55), (2, 43)$

(iv) $((-2), 91), ((-1), 79), (1, 66), (1, 55), (2, 43)$

(v) $((-2), 91), ((-1), 79), ((-2), 65), (1, 55), (2, 43)$

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7. Find the set of points satisfying the equation $y = (-\frac{16}{11}x - \frac{45}{11})$

(i) $((-2), (-\frac{13}{11})), ((-1), (-\frac{29}{11})), ((-2), (-\frac{67}{11})), (1, (-\frac{61}{11})), (2, (-7))$

(ii) $((-2), (-\frac{13}{11})), ((-1), (-\frac{29}{11})), (0, (-\frac{45}{11})), (0, (-\frac{50}{11})), (2, (-7))$

(iii) $((-2), (-\frac{13}{11})), ((-1), (-\frac{29}{11})), (1, (-\frac{56}{11})), (1, (-\frac{61}{11})), (2, (-7))$

(iv) $((-2), (-\frac{13}{11})), ((-1), (-\frac{29}{11})), (0, (-\frac{45}{11})), (1, (-\frac{61}{11})), (4, (-5))$

(v) $((-2), (-\frac{13}{11})), ((-1), (-\frac{29}{11})), (0, (-\frac{45}{11})), (1, (-\frac{61}{11})), (2, (-7))$

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8. Find the set of points satisfying the equation $x = (\frac{1}{10}y - \frac{67}{10})$

(i) $((-2), 47), ((-1), 57), ((-2), 65), (1, 77), (2, 87)$

(ii) $((-2), 47), ((-1), 57), (0, 67), (1, 77), (4, 89)$

(iii) $((-2), 47), ((-1), 57), (1, 66), (1, 77), (2, 87)$

(iv) $((-2), 47), ((-1), 57), (0, 67), (1, 77), (2, 87)$

(v) $((-2), 47), ((-1), 57), (0, 67), (0, 78), (2, 87)$

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9. Find the set of points satisfying the equation $y = \frac{1}{4}x$

(i) ( ) (1) ( ) (1) 1 5

$(-2,-\frac{}{2}),(-1,-\frac{}{4}),(0,0),(1,\frac{}{4}),(4,\frac{}{2})$

(ii) $((-2),(-\frac{1}{2})),((-1),(-\frac{1}{4})),(0,0),(0,\frac{5}{4}),(2,\frac{1}{2})$

(iii) $((-2),(-\frac{1}{2})),((-1),(-\frac{1}{4})),(0,0),(1,\frac{1}{4}),(2,\frac{1}{2})$

(iv) $((-2),(-\frac{1}{2})),((-1),(-\frac{1}{4})),((-2),(-2)),(1,\frac{1}{4}),(2,\frac{1}{2})$

(v) $((-2),(-\frac{1}{2})),((-1),(-\frac{1}{4})),(1,(-1)),(1,\frac{1}{4}),(2,\frac{1}{2})$

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10. Find the set of points satisfying the equation $(7x+3y-2)=0$

(i) $((-2),\frac{16}{3}),((-1),3),(1,(-\frac{1}{3})),(1,(-\frac{5}{3})),(2,(-4))$

(ii) $((-2),\frac{16}{3}),((-1),3),(0,\frac{2}{3}),(0,(-\frac{2}{3})),(2,(-4))$

(iii) $((-2),\frac{16}{3}),((-1),3),(0,\frac{2}{3}),(1,(-\frac{5}{3})),(4,(-2))$

(iv) $((-2),\frac{16}{3}),((-1),3),(0,\frac{2}{3}),(1,(-\frac{5}{3})),(2,(-4))$

(v) $((-2),\frac{16}{3}),((-1),3),((-2),(-\frac{4}{3})),(1,(-\frac{5}{3})),(2,(-4))$

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11. Find the set of points satisfying the equation $y=(-1)$

(i) $((-2),(-1)),((-1),(-1)),((-2),(-3)),(1,(-1)),(2,(-1))$

(ii) $((-2),(-1)),((-1),(-1)),(0,(-1)),(1,(-1)),(4,1)$

(iii) $((-2),(-1)),((-1),(-1)),(0,(-1)),(1,(-1)),(2,(-1))$

(iv) $((-2),(-1)),((-1),(-1)),(0,(-1)),(0,0),(2,(-1))$

(v) $((-2),(-1)),((-1),(-1)),(1,(-2)),(1,(-1)),(2,(-1))$

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12. Find the set of points satisfying the equation $x=(-4)$

(i) $((-4),(-2)),((-4),(-1)),((-6),(-2)),((-4),1),((-4),2)$

(ii) $((-4),(-2)),((-4),(-1)),((-4),0),((-4),1),((-2),4)$

(iii) $((-4),(-2)),((-4),(-1)),((-4),0),((-4),1),((-4),2)$

(iv) $((-4),(-2)),((-4),(-1)),((-3),(-1)),((-4),1),((-4),2)$

(v) $((-4),(-2)),((-4),(-1)),((-4),0),((-5),2),((-4),2)$

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13. Which of the following equations satisfy the given points $((-2),\frac{1}{2}),((-1),\frac{1}{3}),(0,\frac{1}{6}),(1,0),(2,(-\frac{1}{6}))$?

(i) $(-2x-12y+2)=0$

(ii) $x = (\frac{1}{6}y + \frac{7}{2})$

(iii) $y = 9$

(iv) $y = (-\frac{1}{6}x + \frac{59}{6})$

(v) $x = 5$

Which of the following equations satisfy the given points

14. $((-2), \frac{31}{10}), ((-1), \frac{11}{5}), (0, \frac{13}{10}), (1, \frac{2}{5}), (2, (-\frac{1}{2}))$?

(i) $y = (-\frac{9}{10}x + \frac{13}{10})$

(ii) $(4x + 6y - 3) = 0$

(iii) $x = 7$

(iv) $y = (-5)$

(v) $x = (\frac{9}{10}y + \frac{23}{2})$

Which of the following equations satisfy the given points

15. $((-2), \frac{5}{3}), ((-1), \frac{1}{1}), (0, \frac{1}{3}), (1, (-\frac{1}{3})), (2, (-1))$?

(i) $y = (-\frac{1}{3}x + 1)$

(ii) $x = (-9)$

(iii) $y = 4$

(iv) $x = (\frac{1}{3}y - \frac{31}{3})$

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

Which of the following equations satisfy the given points

16. $((-2), (-8)), ((-1), (-8)), (0, (-8)), (1, (-8)), (2, (-8))$?

(i) $x = (y + 3)$

(ii) $y = (-8)$

(iii) $y = (-x - 13)$

(iv) $x = (-5)$

(v) $(8x + 2y - 1) = 0$

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17. Which of the following equations satisfy the given points

$((-4),(-2)),((-4),(-1)),((-4),0),((-4),1),((-4),2)$?

(i) $y = (-5)$

(ii) $x = (\frac{6}{5}y + 2)$

(iii) $(4x + 8y - 1) = 0$

(iv) $y = (-\frac{6}{5}x - \frac{49}{5})$

(v) $x = (-4)$

Assignment Key

1) (iii)
2) (ii)
3) (ii)
4) (ii)
5) (iv)
6) (iii)
7) (v)
8) (iv)
9) (iii)
10) (iv)
11) (iii)
12) (iii)
13) (i)
14) (i)
15) (v)
16) (ii)
17) (v)