



1. Which of the following equations satisfy the given points  $((-2), \frac{1}{5}), ((-1), (-\frac{3}{5})), (0, (-\frac{7}{5})), (1, (-\frac{11}{5})), (2, (-3))$  ?

- (i)  $y=3$  (ii)  $(3x+6y-2)=0$  (iii)  $x=(\frac{4}{5}y-\frac{37}{5})$  (iv)  $y=(-\frac{4}{5}x-1)$  (v)  $(-4x-5y-7)=0$

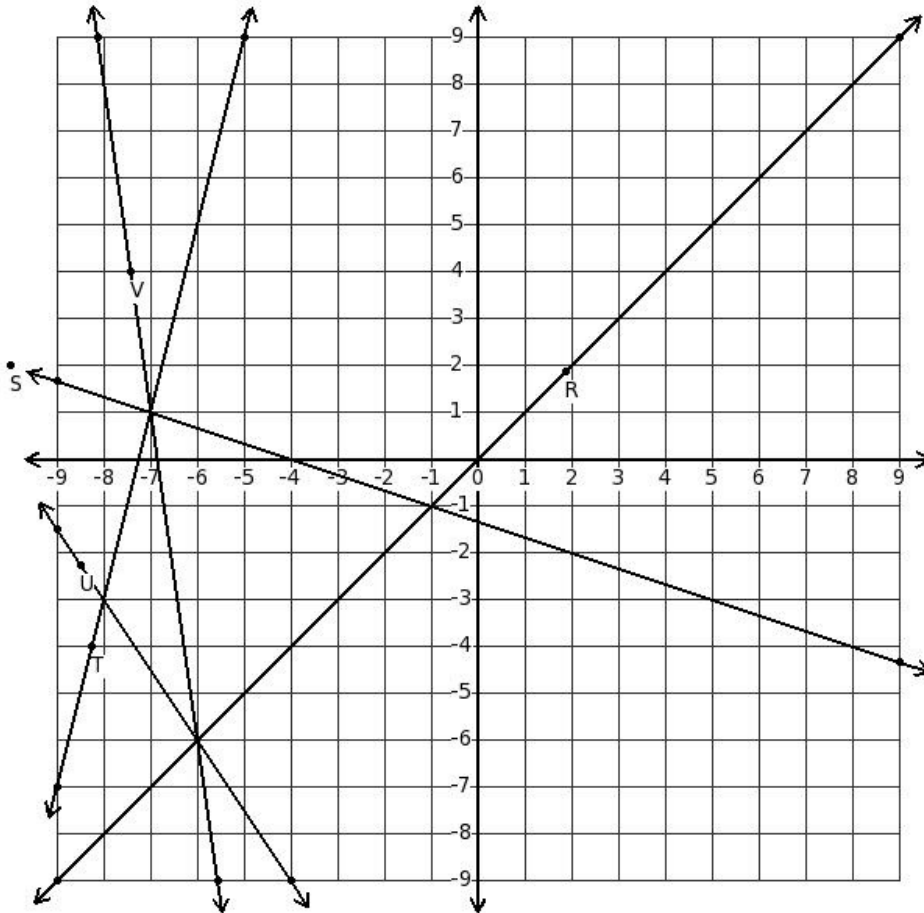
2. Find the set of points satisfying the equation  $y=(-4x+5)$

- (i)  $((-2), 13), ((-1), 9), (0, 5), (0, 2), (2, (-3))$  (ii)  $((-2), 13), ((-1), 9), ((-2), 3), (1, 1), (2, (-3))$   
(iii)  $((-2), 13), ((-1), 9), (1, 4), (1, 1), (2, (-3))$  (iv)  $((-2), 13), ((-1), 9), (0, 5), (1, 1), (4, (-1))$   
(v)  $((-2), 13), ((-1), 9), (0, 5), (1, 1), (2, (-3))$

3. A motor boat can travel at a speed of 12.68 m/sec downstream and 7.14 m/sec upstream. What is the speed of the stream?

- (i) 2.77 m/sec (ii) 1.77 m/sec (iii) 4.77 m/sec (iv) 0.77 m/sec (v) 3.77 m/sec

4. Which of the displayed lines represent the equation  $(5x-5y)=0$  ?



- (i) line with point T (ii) line with point U (iii) line with point S (iv) line with point V (v) line with point R

Solve the following pair of equations :

$$\frac{6}{x+y} + \frac{4}{x-y} = (-22)$$

5.

$$- \frac{2}{x+y} + \frac{2}{x-y} = 14$$

(i)  $(\frac{3}{20}, (\frac{-9}{20}))$  (ii)  $(\frac{3}{20}, (\frac{-7}{18}))$  (iii)  $(\frac{3}{22}, (\frac{-7}{20}))$  (iv)  $(\frac{1}{4}, (\frac{-7}{20}))$  (v)  $(\frac{3}{20}, (\frac{-7}{20}))$

6. Find the set of points satisfying the equation  $x=0$

- (i)  $(0,(-2)),(0,(-1)),(1,(-1)),(0,1),(0,2)$  (ii)  $(0,(-2)),(0,(-1)),(0,0),((-1),2),(0,2)$   
(iii)  $(0,(-2)),(0,(-1)),((-2),(-2)),(0,1),(0,2)$  (iv)  $(0,(-2)),(0,(-1)),(0,0),(0,1),(0,2)$   
(v)  $(0,(-2)),(0,(-1)),(0,0),(0,1),(2,4)$

7. The ratio of coefficients of x and y in the equations of any two parallel lines is

- (i) 1 (ii) not same (iii) 2 (iv) same (v) not proportional

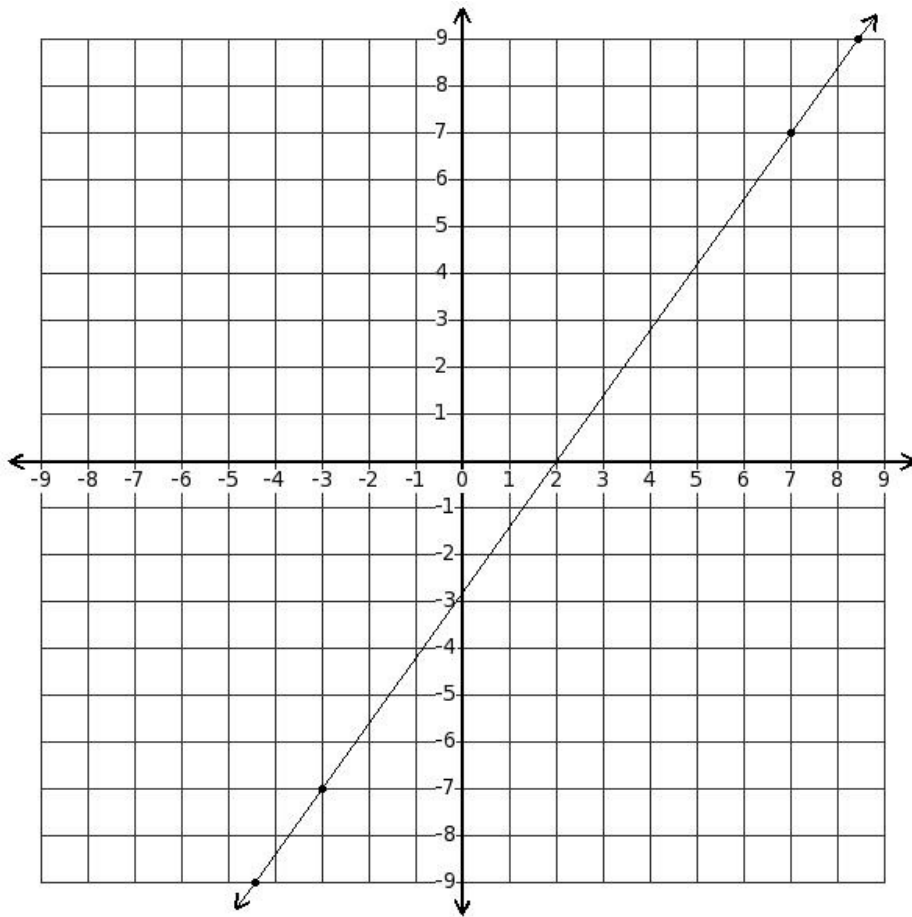
8. Which of the following pairs of lines are parallel?

- (i)  $(4x+3y-13)=0, (4x+3y+37)=0$  (ii)  $(4x+3y-13)=0, (x+3y+25)=0$   
(iii)  $(4x+3y-13)=0, (-7x+4y+7)=0$  (iv)  $(4x+3y-13)=0, (-3x+4y+19)=0$

9. Find the equation of a straight line parallel to y-axis and passing through the point  $((-3),(-3))$

- (i)  $y=(-3)$  (ii)  $x=(-1)$  (iii)  $y=0$  (iv)  $x=(-3)$  (v)  $x=(-4)$

10. Find the equation of the line passing through the points  $(-3, -7)$  and  $(7, 7)$



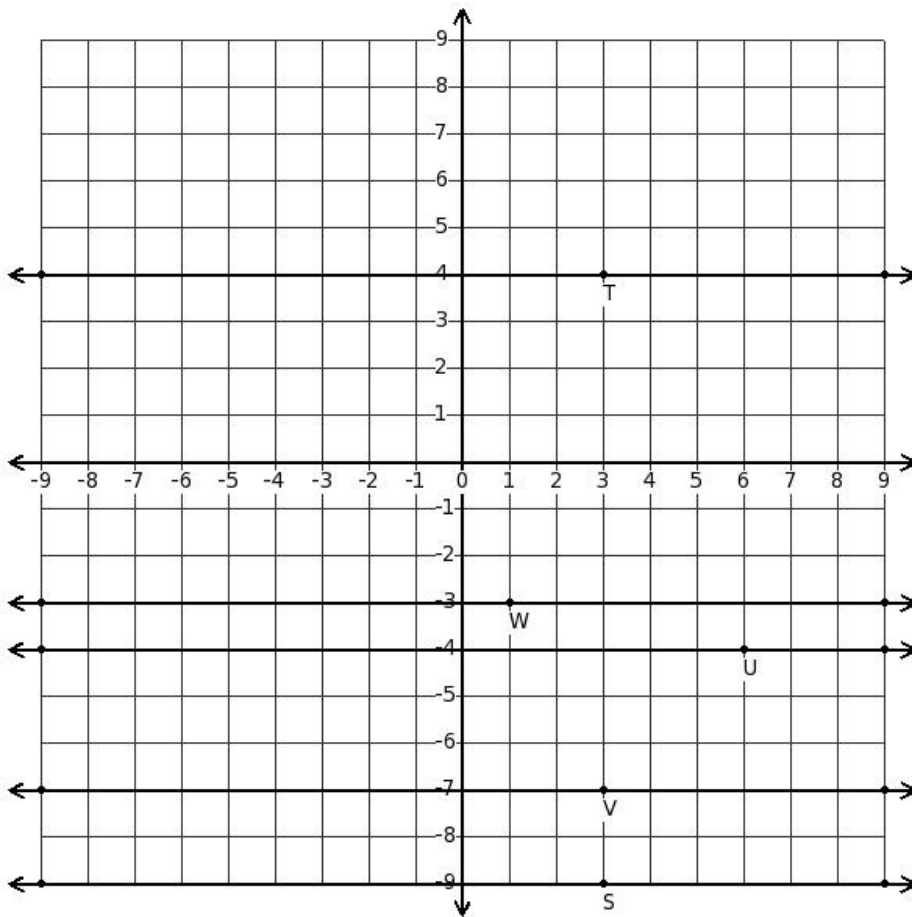
(i)  $(-7x+5y+9)=0$  (ii)  $(15x-10y-28)=0$  (iii)  $(-7x+5y+21)=0$  (iv)  $(14x-10y-28)=0$

(v)  $(13x-10y-28)=0$

11. Solve  $(-5x+2y+14)=0$   
 $(11x-2y-26)=0$

(i)  $(2, -2)$  (ii)  $(2, -4)$  (iii)  $(3, -2)$  (iv)  $(4, -2)$  (v)  $(2, -3)$

12. Which of the displayed lines represent the equation  $y = (-9)$



(i) line with point V (ii) line with point W (iii) line with point T (iv) line with point S (v) line with point U

Solve the following pair of equations :

13. 
$$\frac{9x+17y}{xy} = -4$$

$$\frac{7x+9y}{xy} = -20$$

- (i)  $(\frac{1}{4}, \frac{1}{8})$  (ii)  $(\frac{1}{4}, (\frac{-1}{10}))$  (iii)  $(\frac{1}{6}, (\frac{-1}{8}))$  (iv)  $(\frac{3}{4}, (\frac{-1}{8}))$  (v)  $(\frac{1}{4}, (\frac{-1}{8}))$

14. The equation of the x-axis is

- a)  $x = 1$   
 b)  $x = 0$   
 c)  $x = y$   
 d)  $y = 1$   
 e)  $y = 0$

(i) {a,e} (ii) {c,d,e} (iii) {b,e} (iv) {e}

15. A line which is neither parallel to x-axis nor y-axis is

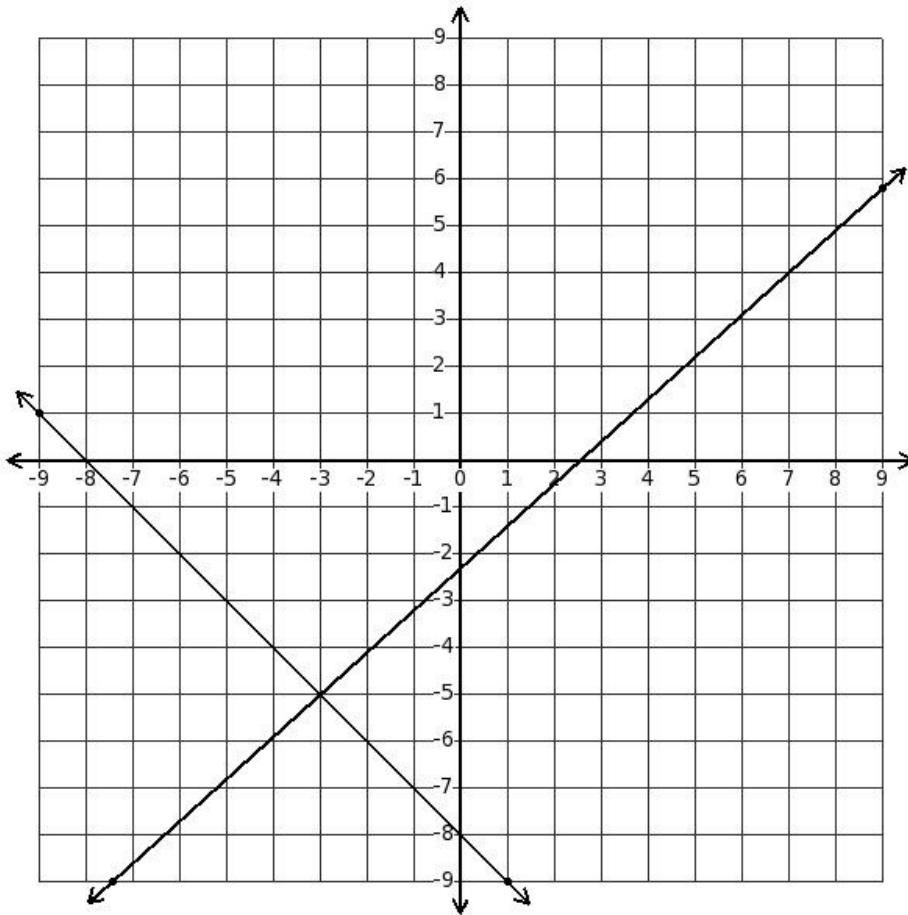
- (i) an oblique line (ii) a curved line (iii) a horizontal line (iv) a vertical line

16. Solve 
$$(-x+5y+2) = (4x-2y-3)$$

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

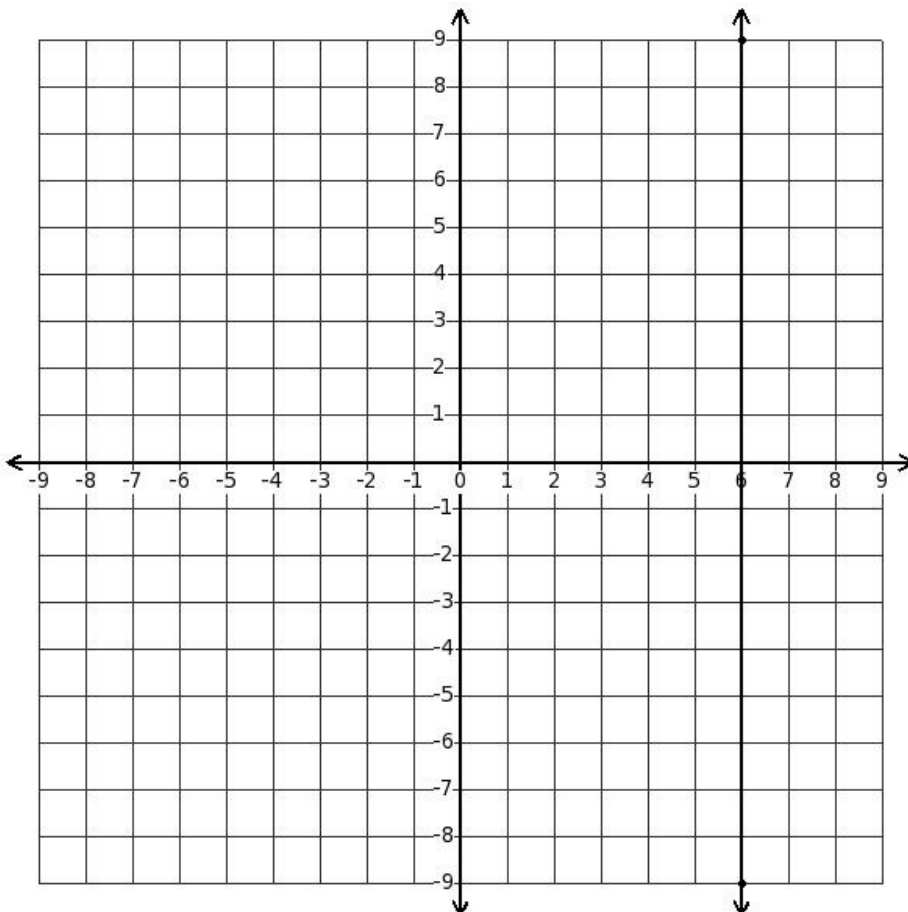
- (i) (2,-1) (ii) (3,-2) (iii) (2,0) (iv) (1,0) (v) (3,-1)

17. Solve  $(-4x - 4y - 32) = 0$   
 $(9x - 10y - 23) = 0$



- (i)  $(-3, -5)$  (ii)  $(-4, -4)$  (iii)  $(-2, -6)$  (iv)  $(-5, -7)$  (v)  $(-1, -3)$

18. Find the equation of the displayed line



- (i)  $3x = 6$  (ii)  $x = 6$  (iii)  $x = 7$  (iv)  $y = 6$  (v)  $x = 5$

19. Which of the following equations satisfy the given points  $((-2), 2), ((-1), \frac{5}{4}), (0, \frac{1}{2}), (1, (-\frac{1}{4})), (2, (-1))$  ?

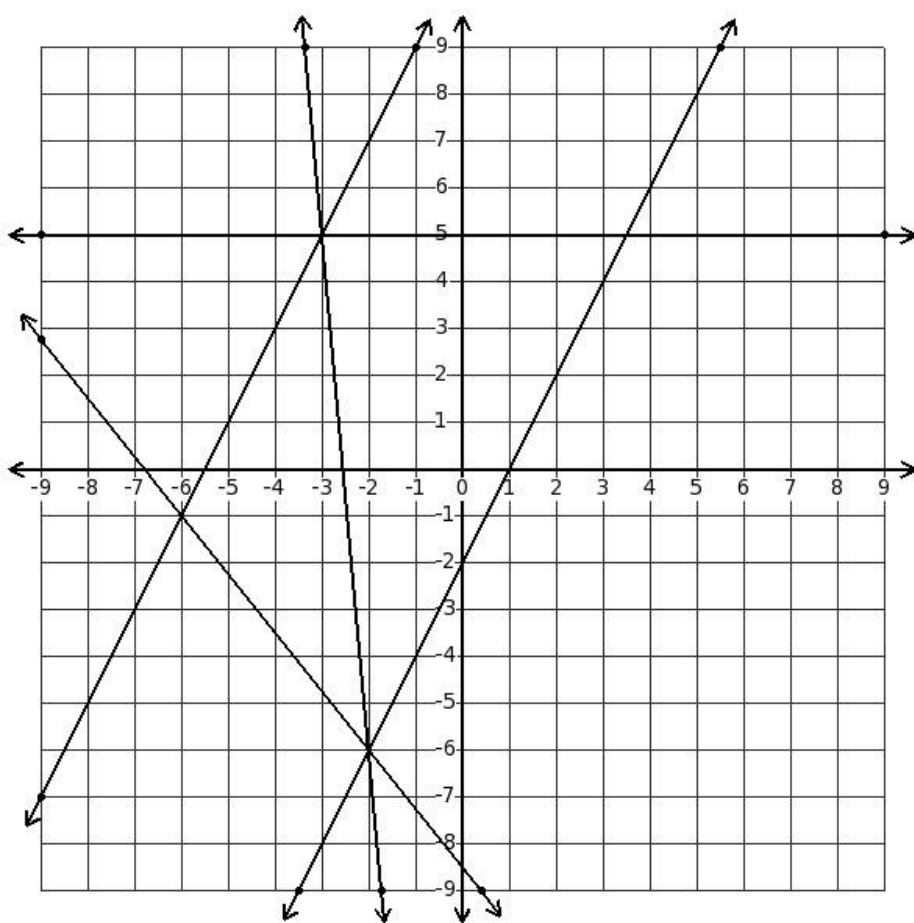
- (i)  $y=7$  (ii)  $(3x+4y-2)=0$  (iii)  $x=(-8)$  (iv)  $y=(-\frac{10}{7}x-\frac{31}{7})$  (v)  $(-10x-7y+18)=0$

20. Write the given equation  $y=(\frac{3}{8}x+\frac{13}{4})$  in  $ax+by+c=0$  form

- (i)  $(-\frac{3}{8}x+y-\frac{13}{4})=0$  (ii)  $(-\frac{3}{10}x+y-\frac{13}{4})=0$  (iii)  $(-\frac{3}{8}x-y-\frac{13}{4})=0$  (iv)  $(-\frac{3}{8}x+3y-\frac{13}{4})=0$

- (v)  $(-\frac{1}{2}x+y-\frac{13}{4})=0$

21. Solve  $(-6x+3y-33)=0$   
 $(y-5) = 0$

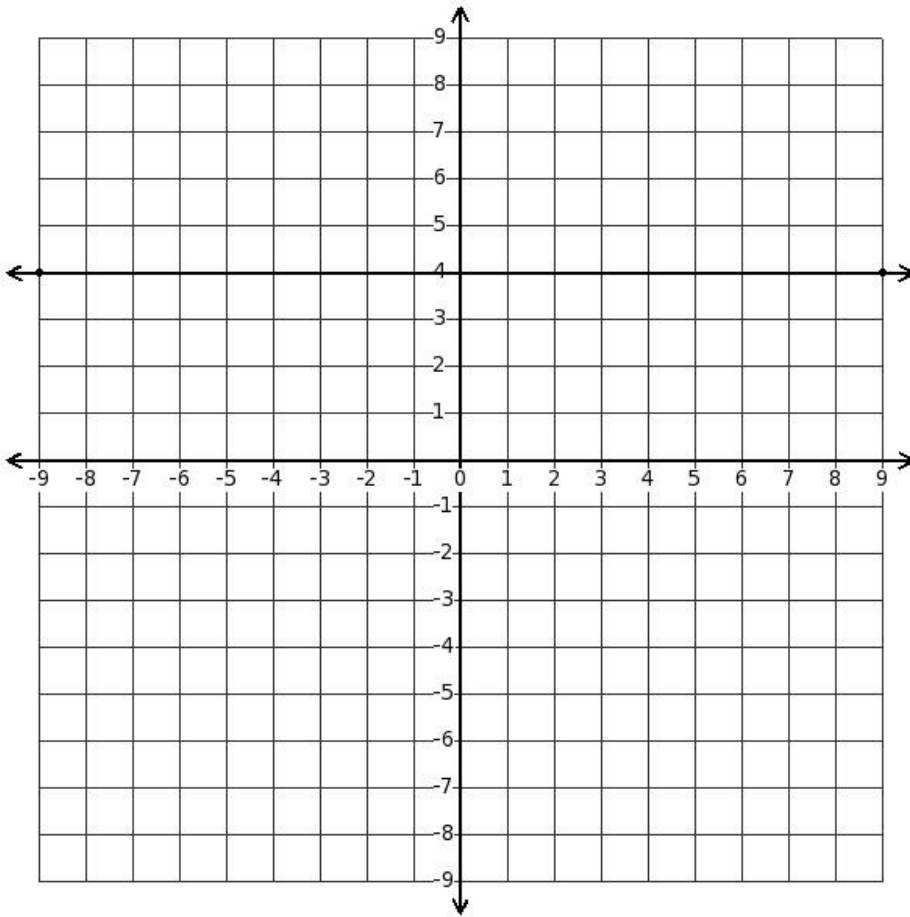


- (i)  $((-6), (-1))$  (ii)  $((-3), 5)$  (iii)  $((-3), 0)$  (iv)  $((-2), (-6))$  (v)  $(0, 5)$

22. Any line parallel to x-axis is

- (i) an oblique line (ii) a vertical line (iii) a horizontal line (iv) a curved line

23. Find the equation of the displayed line

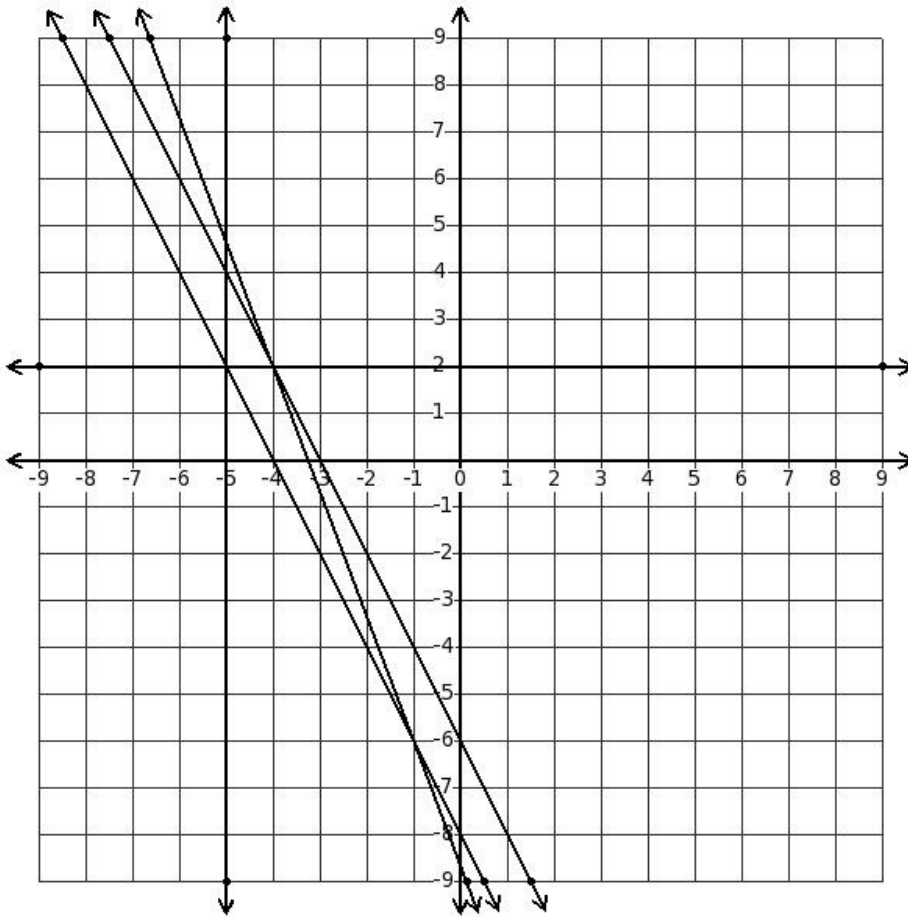


- (i)  $4y=4$  (ii)  $x=4$  (iii)  $y=5$  (iv)  $y=4$  (v)  $y=3$

24. Find the value of  $k$  such that  $(-x-4y+25)=0$  and  $(kx+4y+34)=0$  are parallel to each other

- (i) -1 (ii) 2 (iii) 0 (iv) 4 (v) 1

25. Solve  $(-8x-4y-32)=0$   
 $(x+5) = 0$



- (i)  $(-1, -6)$  (ii)  $(-4, 2)$  (iii)  $(-5, 2)$  (iv)  $(-5, 0)$  (v)  $(0, 2)$

## Assignment Key

1) (v)	2) (v)	3) (i)	4) (v)	5) (v)	6) (iv)
7) (iv)	8) (i)	9) (iv)	10) (iv)	11) (i)	12) (iv)
13) (v)	14) (iv)	15) (i)	16) (iv)	17) (i)	18) (ii)
19) (ii)	20) (i)	21) (ii)	22) (iii)	23) (iv)	24) (v)
25) (iii)					