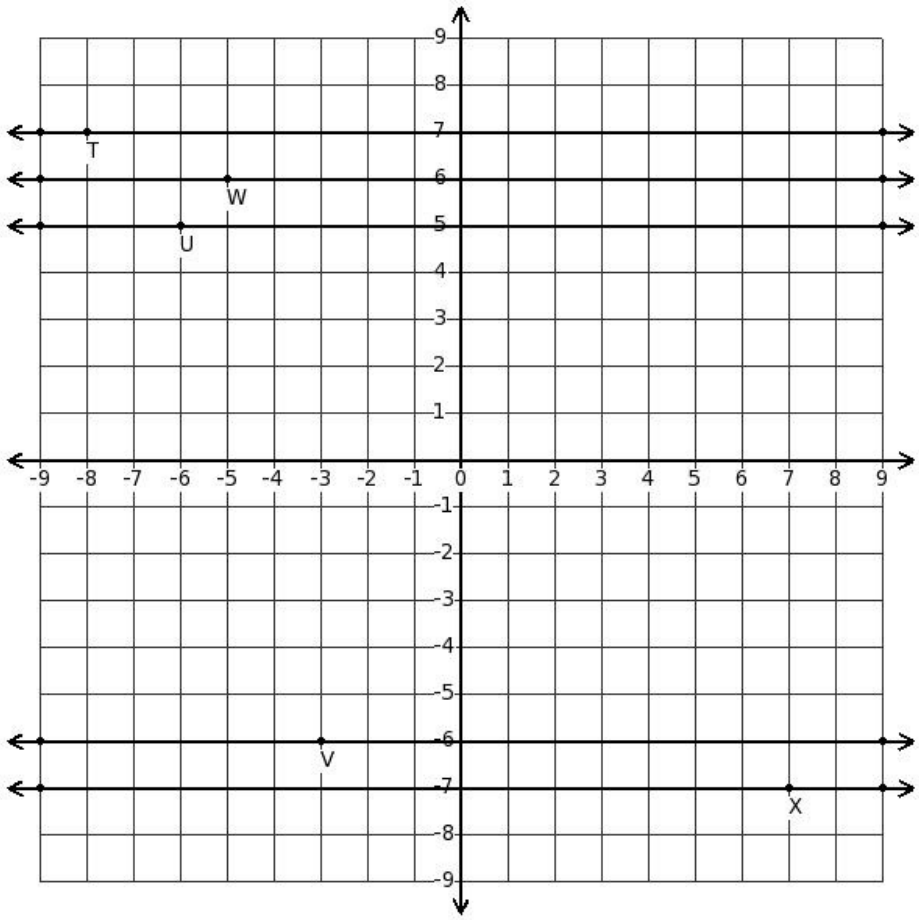
EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Linear Equation in Two variables

Grade : SSC Grade IX

1. Which of the displayed lines represent the equation $y=7$



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

2. The value of y in terms of other variables and constant in $(-3x-9y-7)=(7x-3y-2)$ is

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

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

(i) $(21x^2-13xy-25x+2y^2+7y-4)=0$ (ii) $(-5x-1)=(-8x+2)$ (iii) $(-5x+9y+6)=(-x-6y)$

(iv) $(-3x+5y-z+7)=(4x-3y+4z+8)$ (v) $(5x^2-16x-16)=(-2x-8)$

4. Find the set of points satisfying the equation $(8x+5y-4)=0$

(i) $((-2),4),((-1),\frac{12}{5}),((-2),(-\frac{6}{5})),(1,(-\frac{4}{5})),(2,(-\frac{12}{5}))$

(ii) $((-2),4),((-1),\frac{12}{5}),(0,\frac{4}{5}),(1,(-\frac{4}{5})),(2,(-\frac{12}{5}))$ (iii) $((-2),4),((-1),\frac{12}{5}),(0,\frac{4}{5}),(1,(-\frac{4}{5})),(4,(-\frac{2}{5}))$

(iv) $((-2),4),((-1),\frac{12}{5}),(1,(-\frac{1}{5})),(1,(-\frac{4}{5})),(2,(-\frac{12}{5}))$ (v) $((-2),4),((-1),\frac{12}{5}),(0,\frac{4}{5}),(0,\frac{1}{5}),(2,(-\frac{12}{5}))$

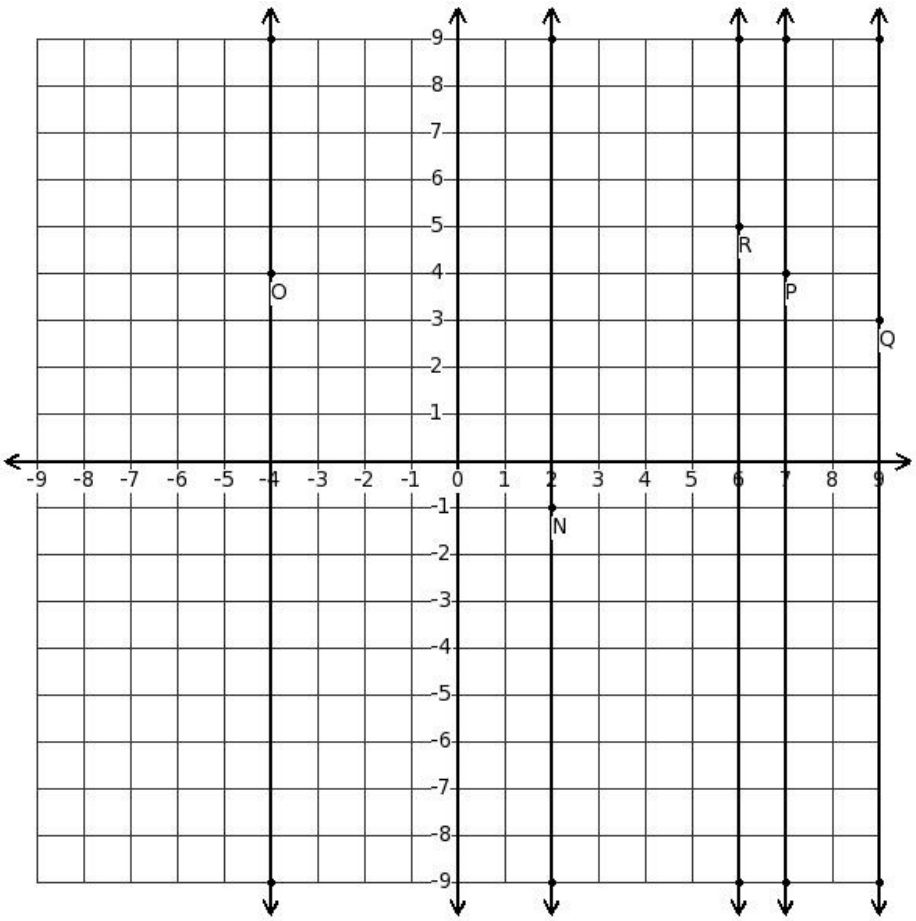
5. Equation of a straight line which is parallel to y-axis (where k is a constant) is

(i) $x=y$ (ii) $x=0$ (iii) $y=k$ (iv) $x=k$ (v) $y=0$

6. The point of intersection of x-axis and y-axis

(i) $(0,9)$ (ii) $(1,0)$ (iii) $(0,0)$ (iv) $(1,1)$ (v) $(9,0)$

7. Which of the displayed lines represent the equation $x=2$



(i) line with point R (ii) line with point Q (iii) line with point N (iv) line with point P (v) line with point O

8. Find the set of points satisfying the equation $y=(\frac{11}{6}x-\frac{65}{6})$

(i) $((-2),(-\frac{29}{2})),((-1),(-\frac{38}{3})),(0,(-\frac{65}{6})),(1,(-9)),(2,(-\frac{43}{6}))$

(ii) $((-2),(-\frac{29}{2})),((-1),(-\frac{38}{3})),(0,(-\frac{65}{6})),(0,(-8)),(2,(-\frac{43}{6}))$

(iii) $((-2),(-\frac{29}{2})),((-1),(-\frac{38}{3})),(0,(-\frac{65}{6})),(1,(-9)),(4,(-\frac{31}{6}))$

(iv) $((-2),(-\frac{29}{2})),((-1),(-\frac{38}{3})),(1,(-\frac{71}{6})),(1,(-9)),(2,(-\frac{43}{6}))$

(v) $((-2),(-\frac{29}{2})),((-1),(-\frac{38}{3})),((-2),(-\frac{77}{6})),(1,(-9)),(2,(-\frac{43}{6}))$

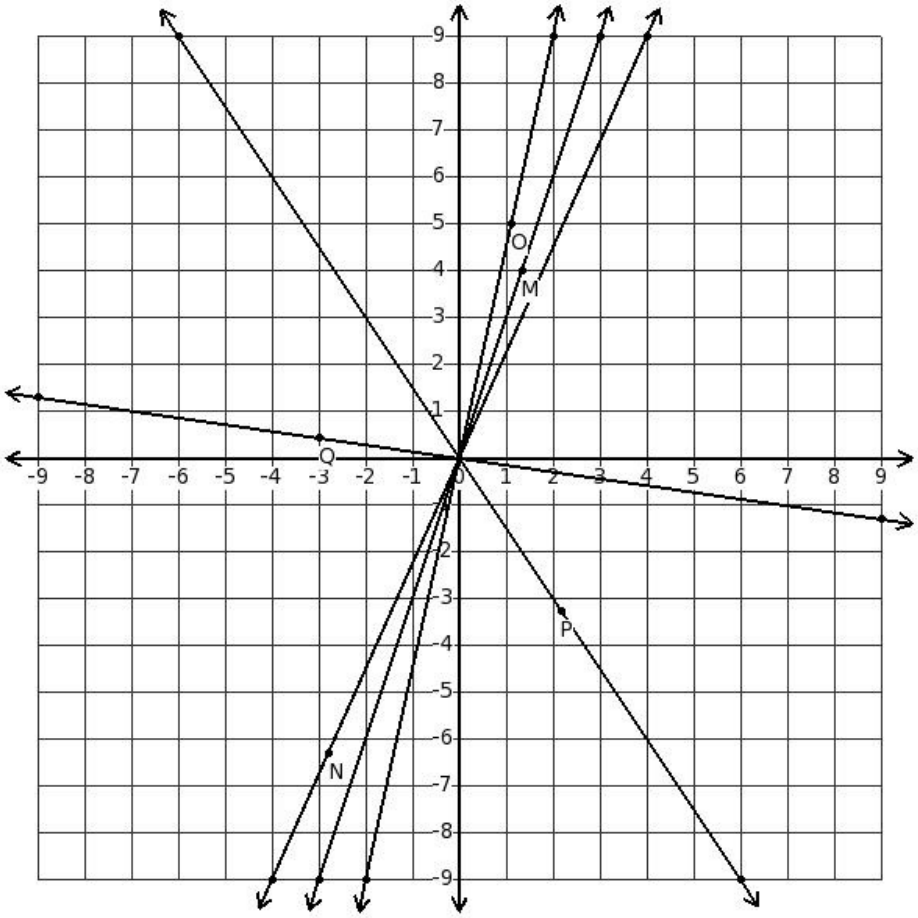
9. The equation of the line with slope $m\neq 0$ and y-intercept $c\neq 0$ is

(i) $x=my+c$ (ii) $y=mx+c$ (iii) $y=0$ (iv) $y=mx$ (v) $x=0$

10. Write the given equation $(-x-5y-15)=0$ in $y=mx+c$ form

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

11. Which of the displayed lines represent the equation $y=3x$



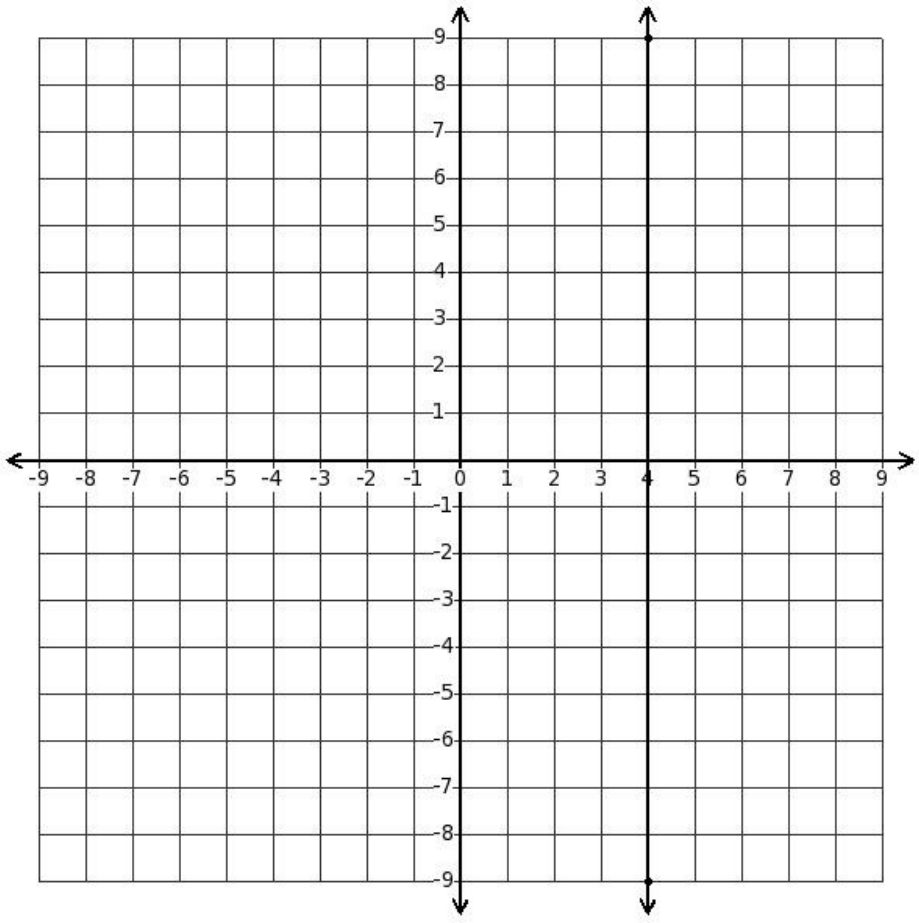
(i) line with point N (ii) line with point Q (iii) line with point O (iv) line with point P (v) line with point M

12. The linear equation $(-6x-7y+1)=(x+7y-4)$ is equivalent to

(i) $(-7x-14y+5)=0$ (ii) $(-6x-7y+1)=(x+9y-4)$ (iii) $(-6x-7y+1)=(x+4y-4)$

(iv) $(-6x-14y+5)=0$ (v) $(-8x-14y+5)=0$

13. Find the equation of the displayed line



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

14. The value of x in terms of other variables and constant in $(-3x-9y+9)=(4x-6y+6)$ is

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

15. Find the equation of a straight line parallel to x-axis and passing through the point $(3,(-2))$

(i) $y=(-2)$ (ii) $y=1$ (iii) $x=3$ (iv) $x=5$ (v) $y=(-3)$

16. Find the set of points satisfying the equation $(-10x+6y-22)=0$

(i) $((-2),\frac{1}{3}),((-1),2),(0,\frac{11}{3}),(0,\frac{19}{3}),(2,7)$ (ii) $((-2),\frac{1}{3}),((-1),2),((-2),\frac{5}{3}),(1,\frac{16}{3}),(2,7)$

(iii) $((-2),\frac{1}{3}),((-1),2),(1,\frac{8}{3}),(1,\frac{16}{3}),(2,7)$ (iv) $((-2),\frac{1}{3}),((-1),2),(0,\frac{11}{3}),(1,\frac{16}{3}),(2,7)$

(v) $((-2),\frac{1}{3}),((-1),2),(0,\frac{11}{3}),(1,\frac{16}{3}),(4,9)$

17. The equation of x-axis is

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

18. Any line parallel to x-axis is

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

19. Which of the following equations satisfy the given points $((-2),7),((-1),7),(0,7),(1,7),(2,7)$?

(i) $x=1$ (ii) $y=(-\frac{5}{4}x+\frac{33}{4})$ (iii) $(20x+27y-12)=0$ (iv) $y=7$ (v) $x=(\frac{5}{4}y-\frac{31}{4})$

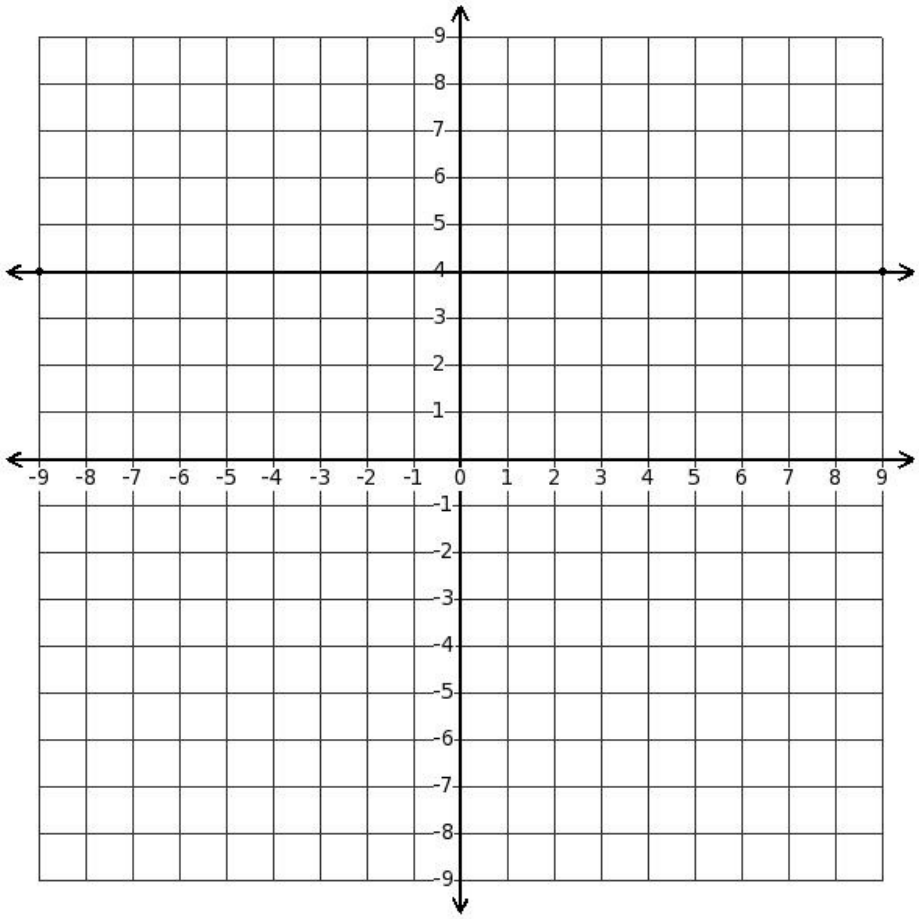
20. Find the set of points satisfying the equation $y=(-\frac{7}{4}x)$

(i) $((-2),\frac{7}{2}),((-1),\frac{7}{4}),(0,0),(1,(-\frac{7}{4})),(2,(-\frac{7}{2}))$ (ii) $((-2),\frac{7}{2}),((-1),\frac{7}{4}),((-2),(-2)),(1,(-\frac{7}{4})),(2,(-\frac{7}{2}))$

(iii) $((-2),\frac{7}{2}),((-1),\frac{7}{4}),(0,0),(1,(-\frac{7}{4})),(4,(-\frac{3}{2}))$ (iv) $((-2),\frac{7}{2}),((-1),\frac{7}{4}),(1,(-1)),(1,(-\frac{7}{4})),(2,(-\frac{7}{2}))$

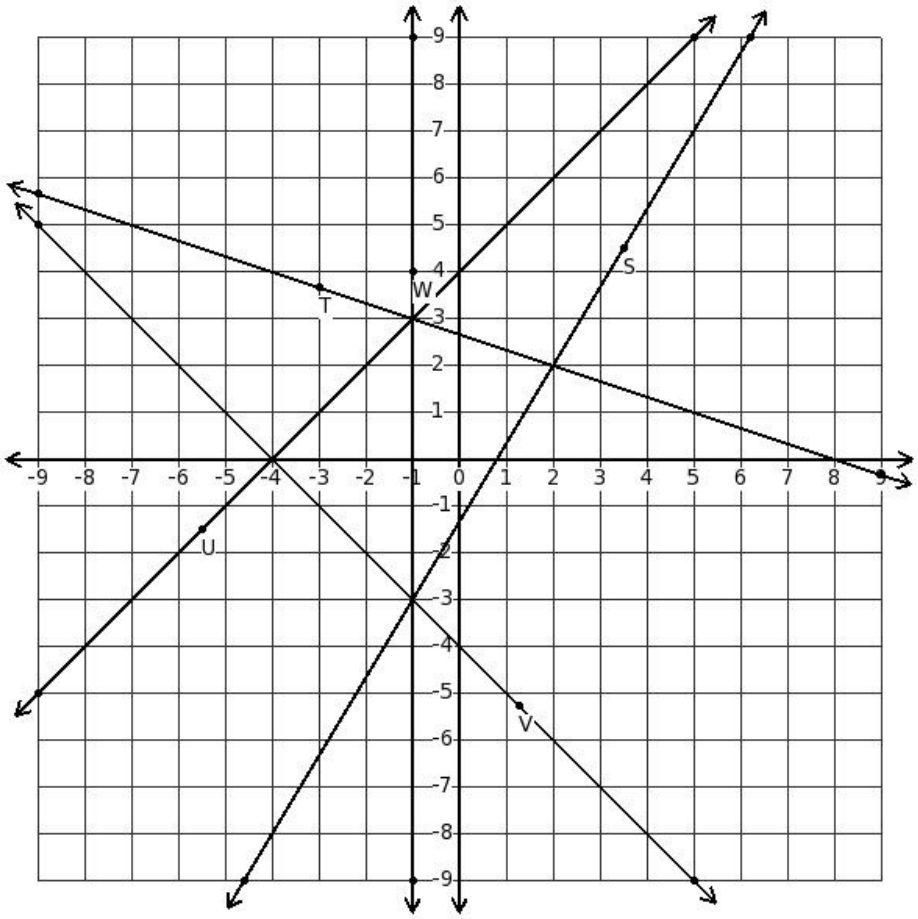
(v) $((-2),\frac{7}{2}),((-1),\frac{7}{4}),(0,0),(0,(-\frac{3}{4})),(2,(-\frac{7}{2}))$

21. Find the equation of the displayed line



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

22. Which of the displayed lines represent the equation $(5x-3y-4)=0$?



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

23. The equation of the x-axis is

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

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

24. Any line parallel to y-axis is

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

25. Which of the following equations satisfy the given points $((-2),\frac{14}{3}),((-1),\frac{8}{3}),(0,\frac{2}{3}),(1,(-\frac{4}{3})),(2,(-\frac{10}{3}))$?

(i) $(-8x-10y-6)=0$ (ii) $y=(-1)$ (iii) $(6x+3y-2)=0$ (iv) $x=(\frac{4}{5}y-\frac{16}{5})$ (v) $y=(-\frac{4}{5}x-\frac{21}{5})$

Assignment Key

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