Answer Key

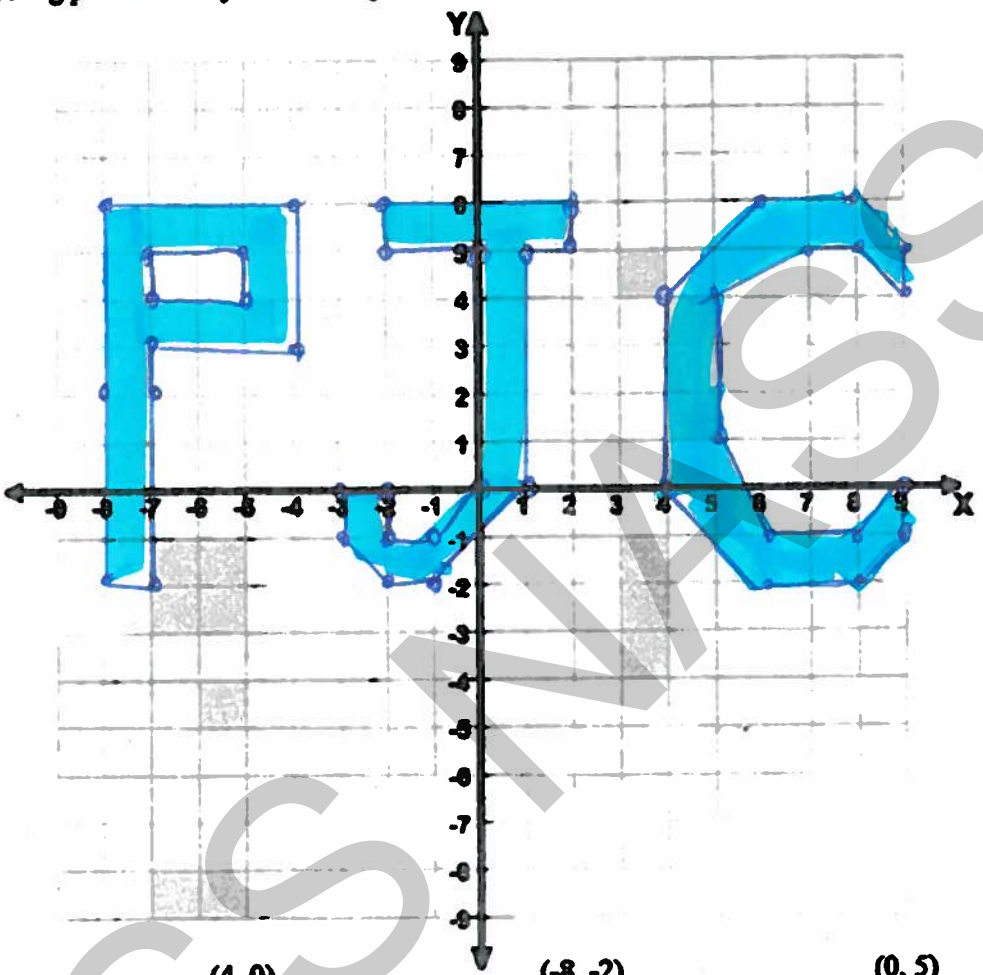
Linear Equations & Inequalities Booklet

Secondary 4
Ms. Nassif

MISS NASSIF

THE COORDINATE PLANE

General Directions: Plot each ordered pair on this grid. Draw line segments to connect the points in the order listed. Connect the points as you go. Do NOT wait until the end to connect the points. Stop connecting points when you see "Stop". Start a new line segment with the next group of points.



Start
(4, 4)
(6, 6)
(8, 6)
(9, 5)
(9, 4)
(8, 5)
(7, 5)
(5, 4)
(5, 1)
(6, -1)
(8, -1)
(9, 0)
(9, -1)
(8, -2)
(6, -2)

(4, 0)
(4, 4)
Stop

Start
(-7, 4)
(-5, 4)
(-5, 5)
(-7, 5)
(-7, 4)
Stop

Start
(-4, 3)
(-4, 6)
(-8, 6)

(-8, -2)
(-7, -2)
(-7, 3)
(-4, 3)
Stop

Start
(1, 0)
(-1, -2)
(-2, -2)
(-3, -1)
(-3, 0)
(-2, 0)
(-2, -1)
(-1, -1)
(0, 0)

(0, 5)
(-2, 5)
(-2, 6)
(2, 6)
(2, 5)
(1, 5)
(1, 0)
Stop

Done

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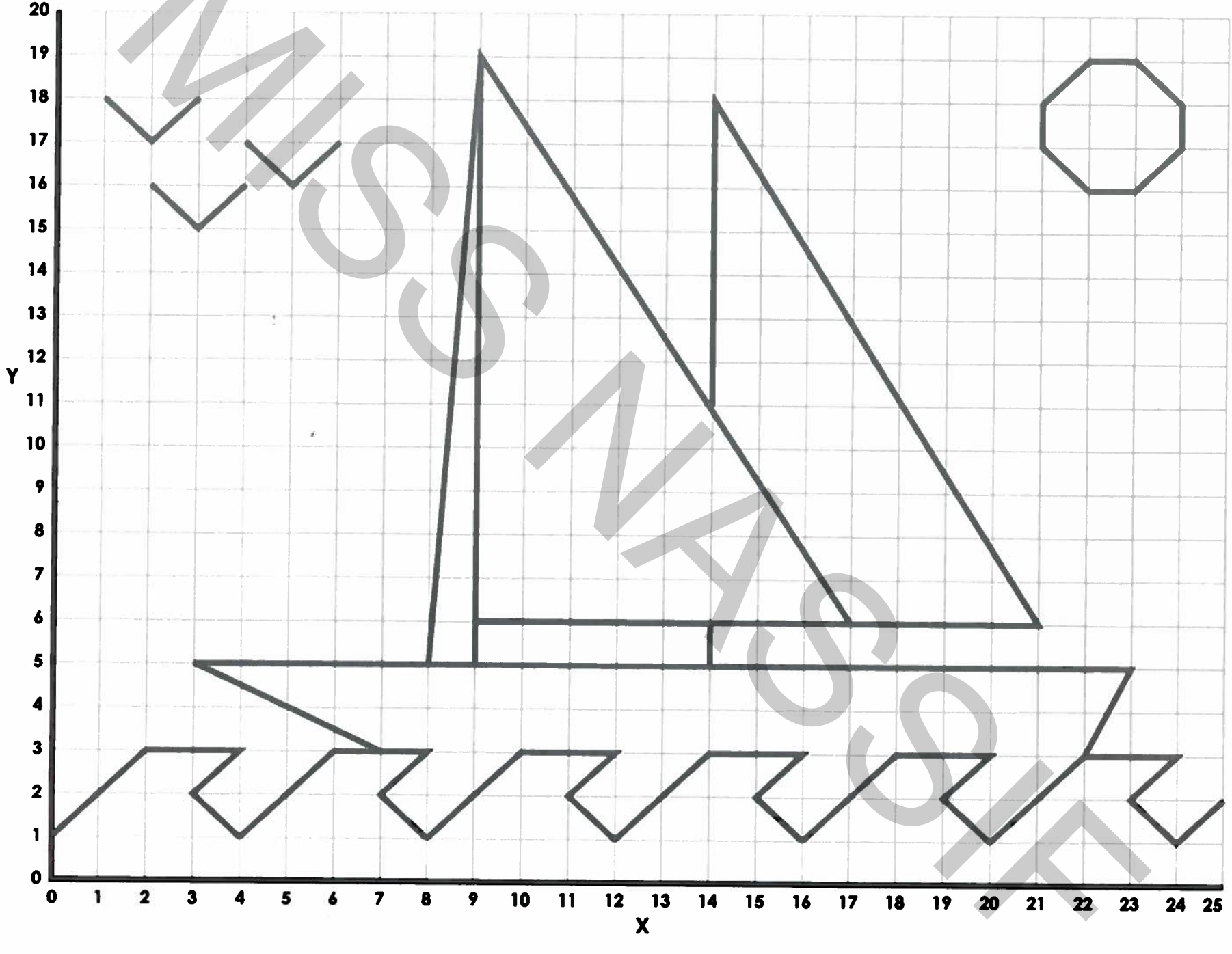
River Riding



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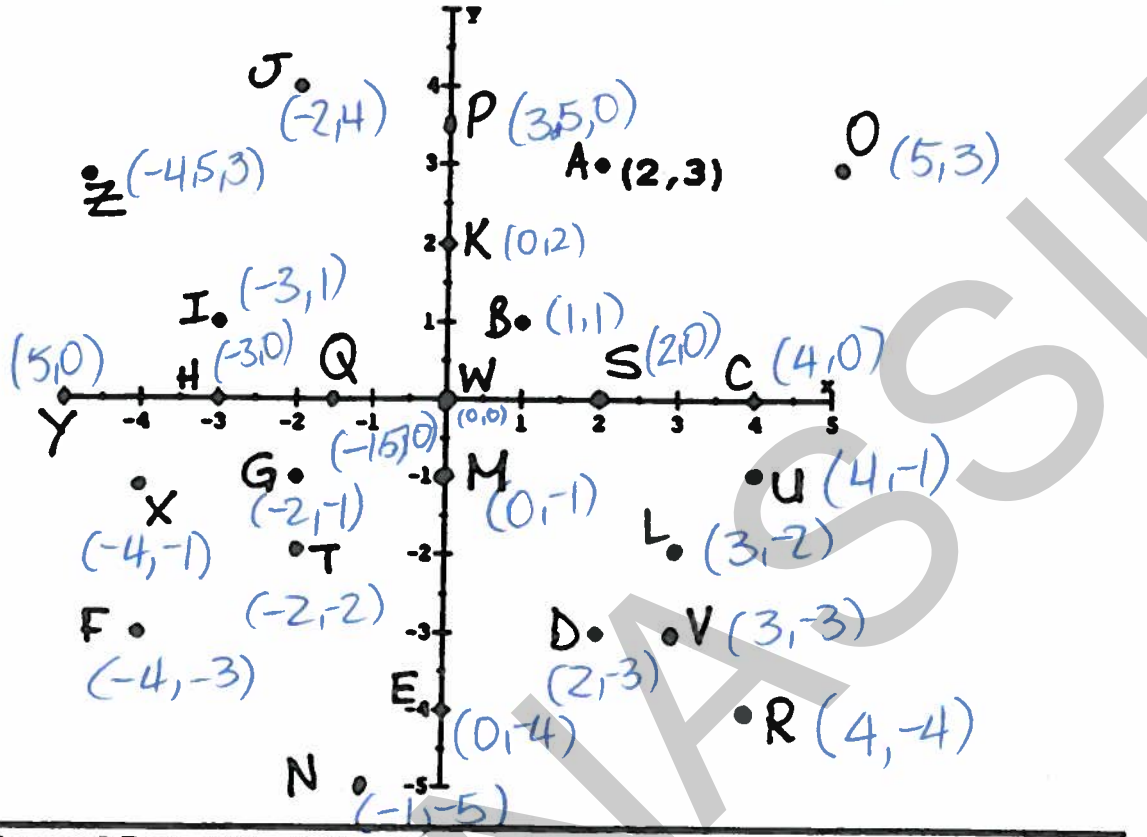
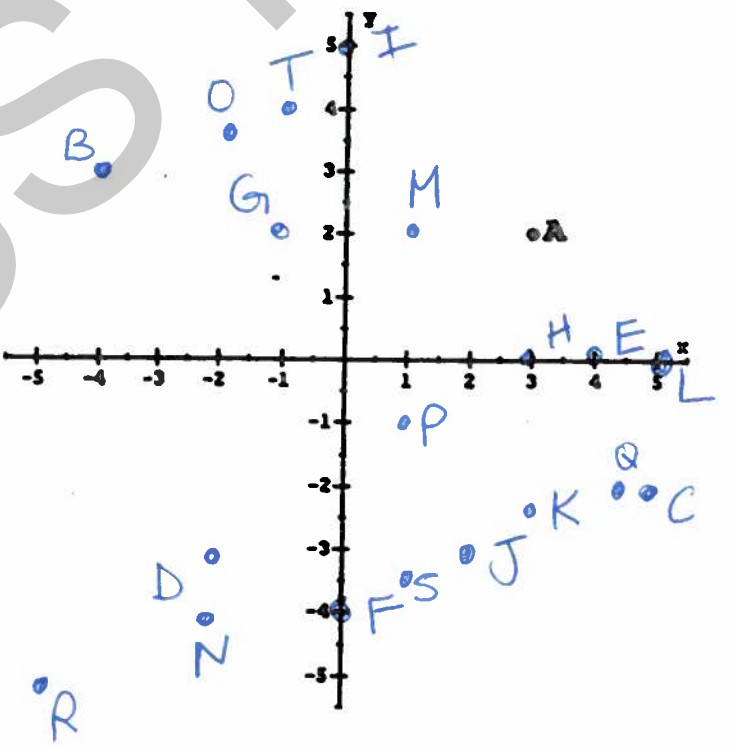
THE COORDINATE PLANE

Label the following points with their respective coordinates



Plot and Label the following points on the grid.

A	**(3, 2)**
B	**(−4, 3)**
C	**(5, −2)**
D	**(−2, −3)**
E	**(4, 0)**
F	**(0, −4)**
G	**(−1, 2)**
H	**(−3, 0)**
I	**(0, 5)**
J	**(2, −3)**



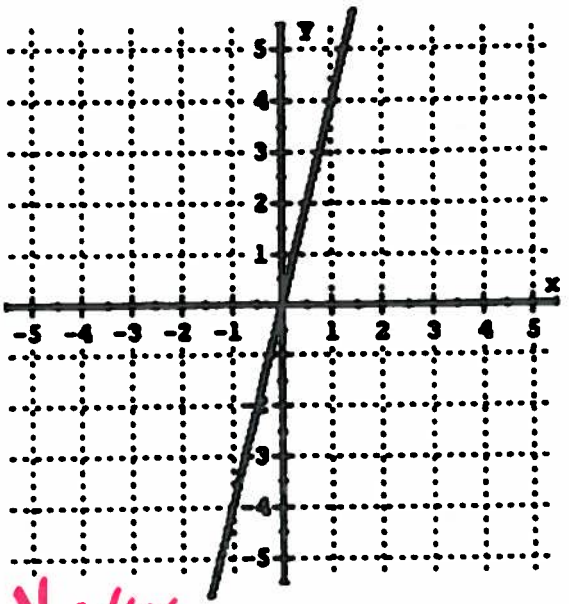
K (3, -2.5)
L (5, 0)
M (1, 2)
N (-3, 4)
O (-2, 3.5)
P (1, -1)
Q (4.5, -2)
R (-5, -5)
S (1, -3.5)
T (-1, 4)

MISS NASSIF

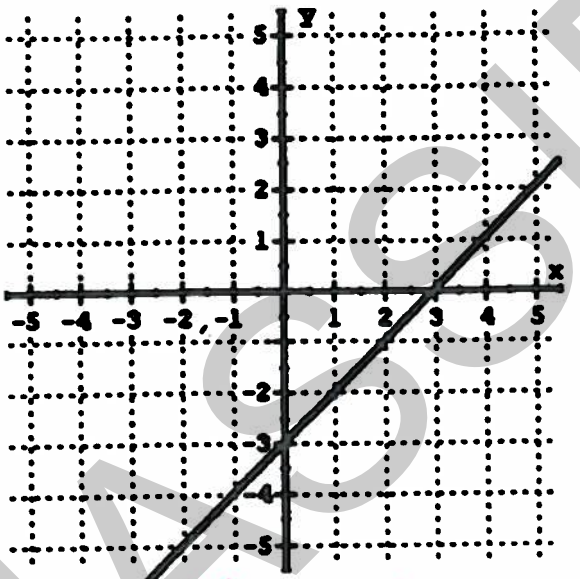
easy B

LINEAR EQUATIONS

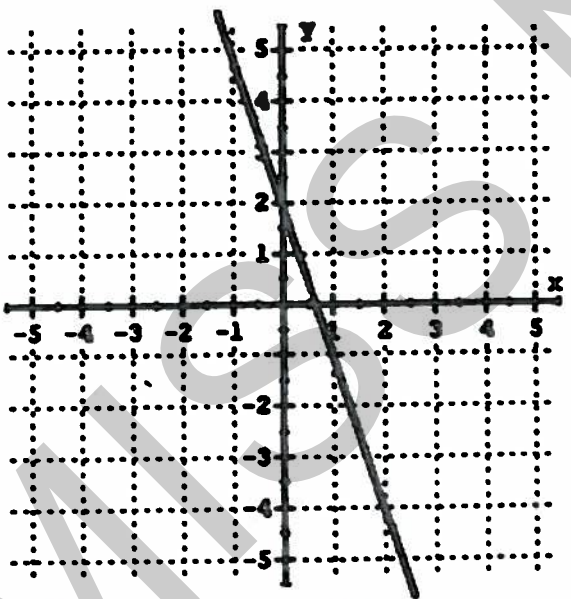
Write the equation (y = ax + b) for each line.



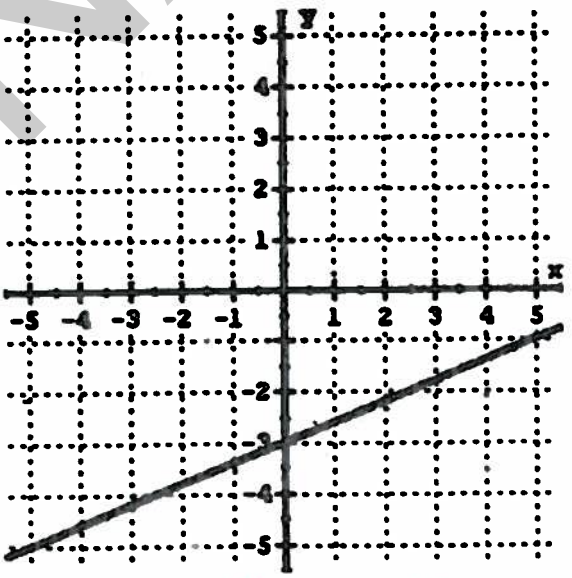
$y = 4x$



$y = x - 3$



$y = -3x + 2$



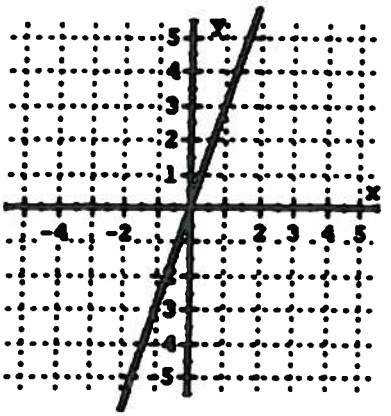
$y = \frac{2}{5}x - 3$

MISS NASIF

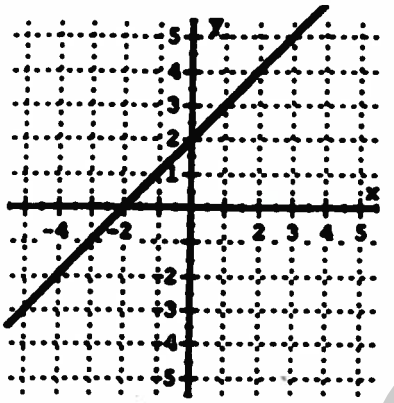
Easy b

LINEAR EQUATIONS

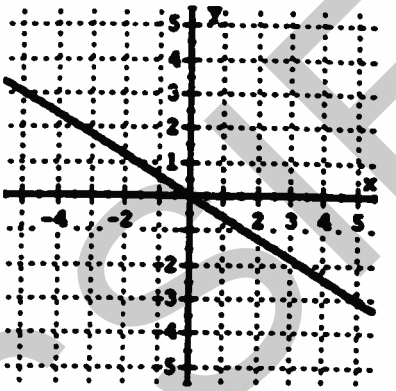
Write the equation (y = ax + b) for each line.



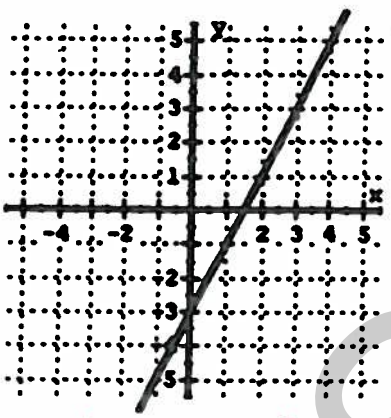
1) $y = 3x$



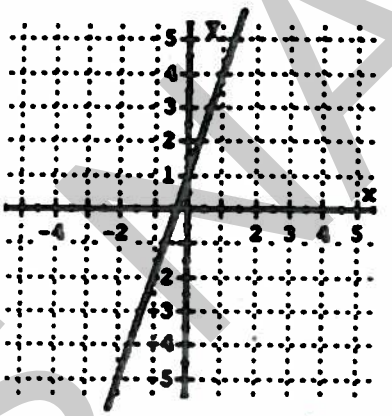
2) $y = x + 2$



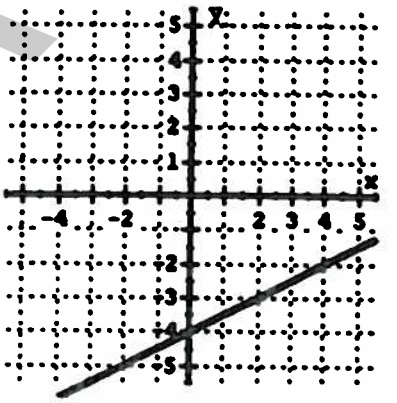
3) $y = -\frac{3}{5}x$



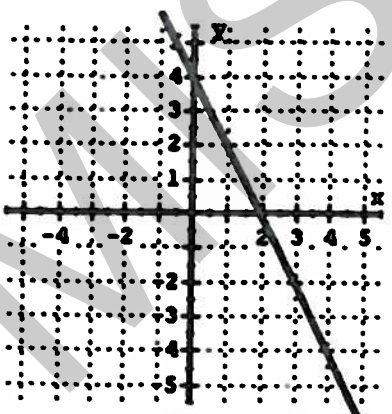
4) $y = 2x - 3$



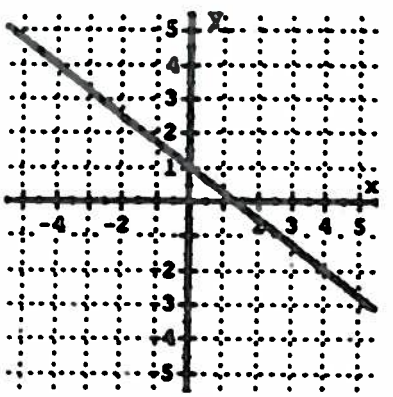
5) $y = 3x + 1$



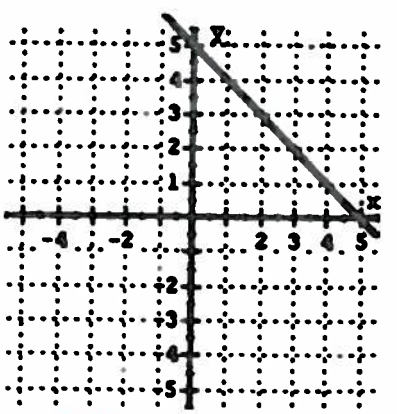
6) $y = \frac{1}{2}x - 4$



7) $y = -2x + 4$



8) $y = \frac{-3}{4}x + 1$



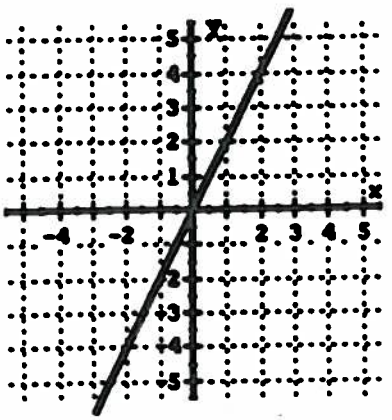
9) $y = -x + 5$

MISSING SLIP

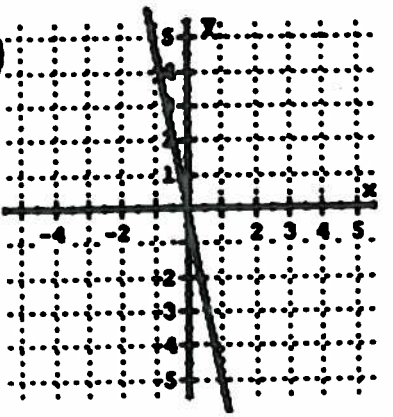
Easy B

LINEAR EQUATIONS

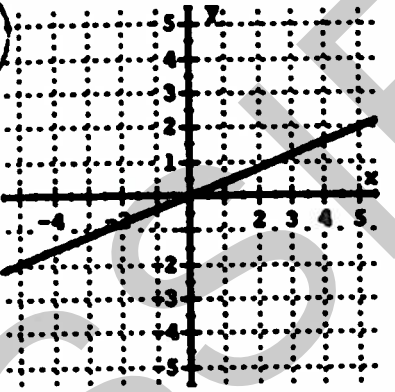
Write the equation (y = ax + b) for each line.

1) 

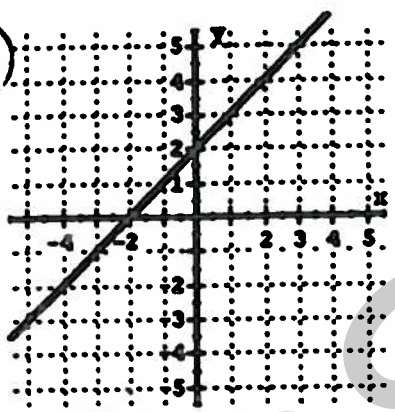
$y = 2x$

2) 

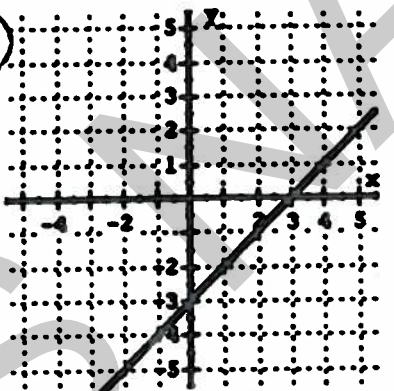
$y = -5x$

3) 

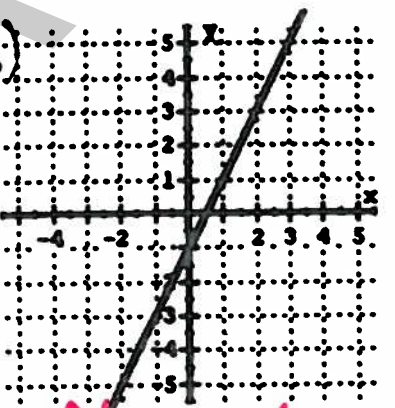
$y = \frac{2}{5}x$

4) 

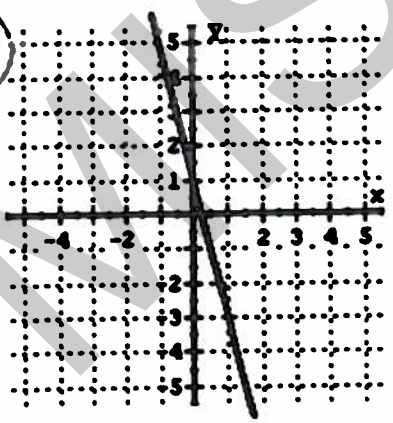
$y = x + 2$

5) 

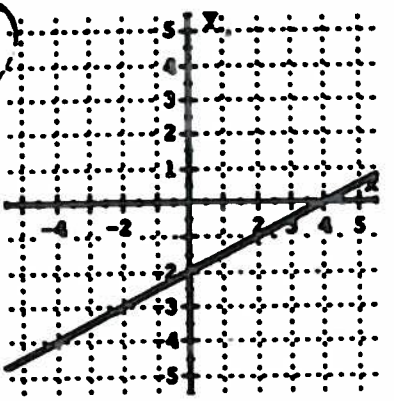
$y = x - 3$

6) 

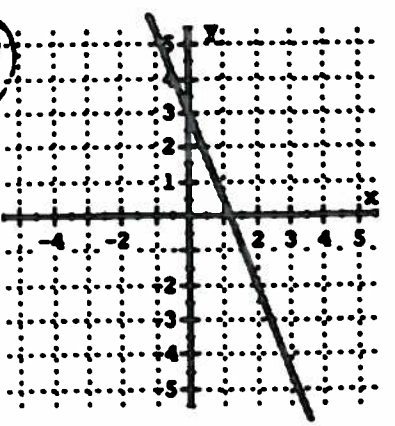
$y = 2x - 1$

7) 

$y = -4x + 1$

8) 

$y = \frac{1}{2}x - 2$

9) 

$y = \frac{-5}{2}x + 3$

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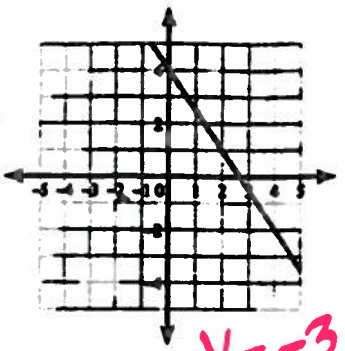
LINEAR EQUATIONS

To find b ask students to do p 7, 9, 6 in order

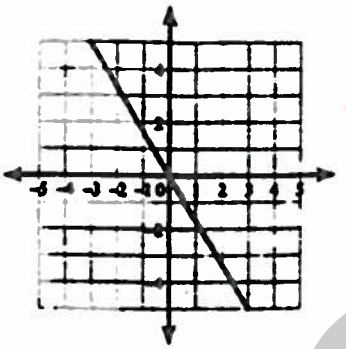
Write the equation (y = ax + b) for each line.

1)



$y = -\frac{3}{2}x + 4$

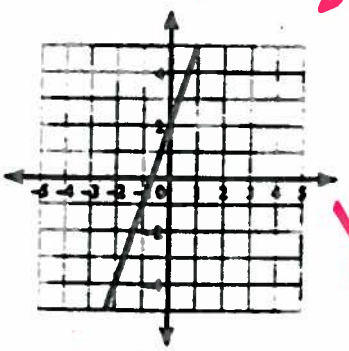
2)



$y = -\frac{5}{3}x$

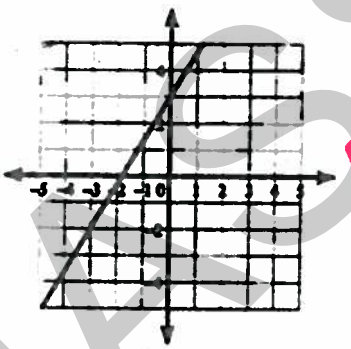
Easy b

3)



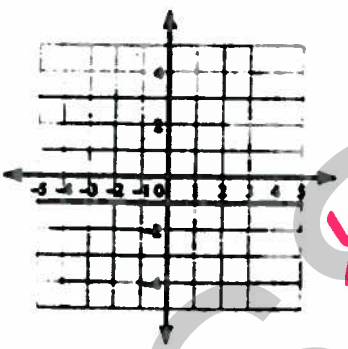
$y = 3x + 2$

4)



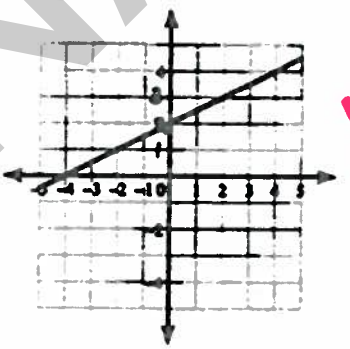
$y = \frac{5}{3}x + 3$

5)



$y = -1$

6)

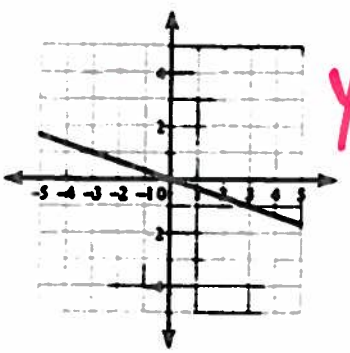


$y = \frac{1}{2}x + 2$

7)

$y = 3x + 4$

8)



$y = \frac{-1}{3}x$

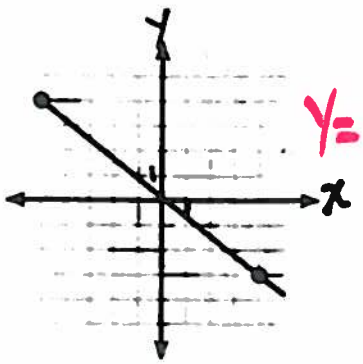
MISS NASSIF

m a b

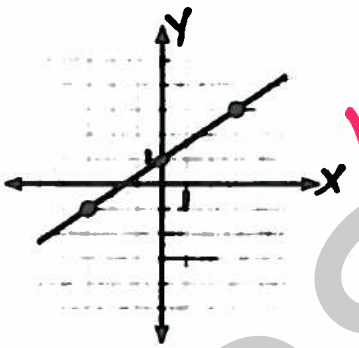
Hwk

LINEAR EQUATIONS

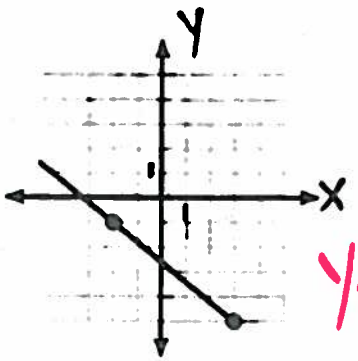
Write the equation (y = ax + b) for each line.

1) 

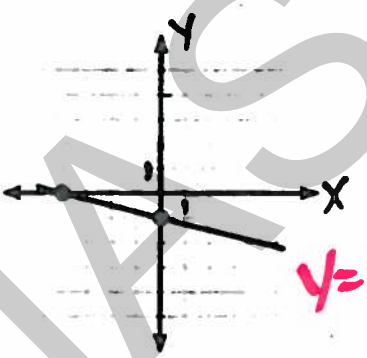
$y = -\frac{7}{9}x$

2) 

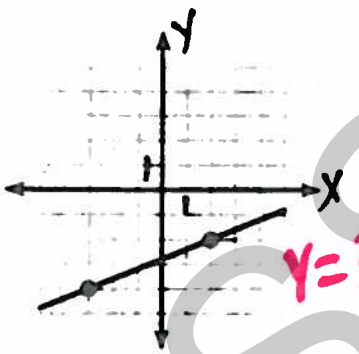
$y = \frac{2}{3}x + 1$

3) 

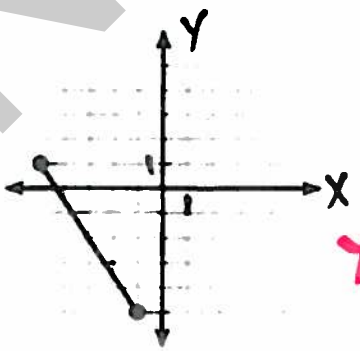
$y = -\frac{4}{5}x - \frac{13}{5}$

4) 

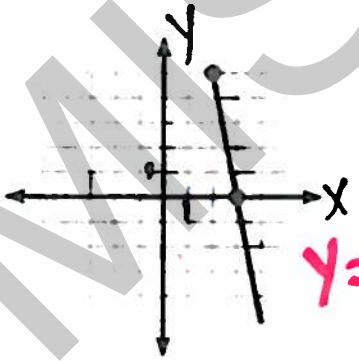
$y = -\frac{1}{4}x - 1$

5) 

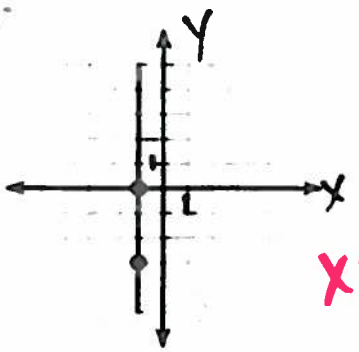
$y = \frac{2}{5}x - \frac{14}{5}$

6) 

$y = -\frac{3}{2}x - \frac{13}{2}$

7) 

$y = -5x + 15$

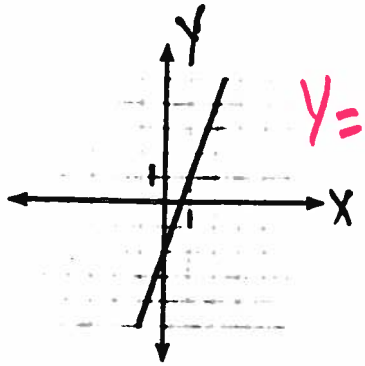
8) 

$x = -1$

MISS NASSIF

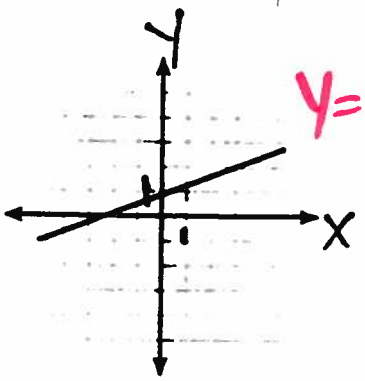
TOO Long
No rule

9)



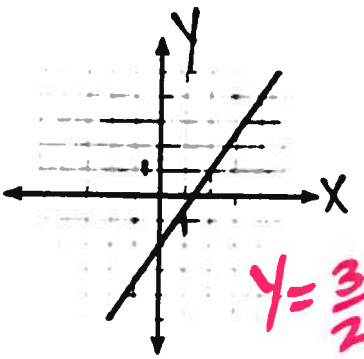
$y = 3x + -2$

10)



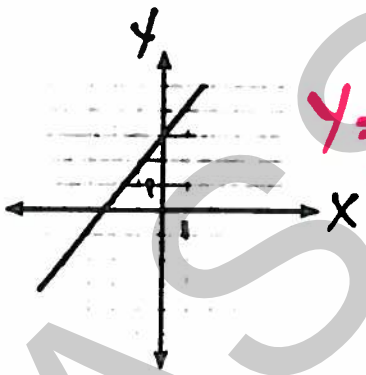
$y = \frac{3}{8}x + 1$

11)



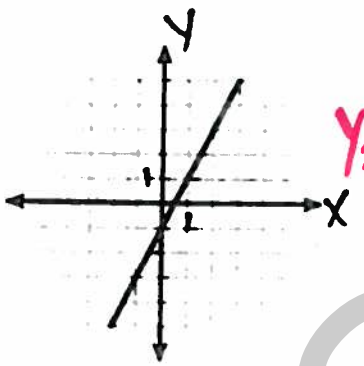
$y = \frac{3}{2}x - 2$

12)



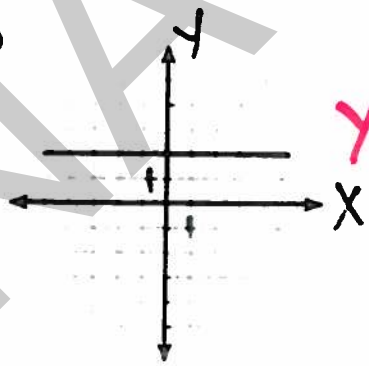
$y = \frac{5}{4}x + 3$

13)



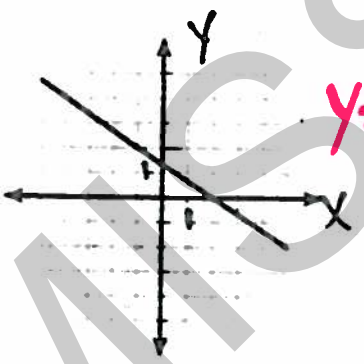
$y = 2x - 1$

14)



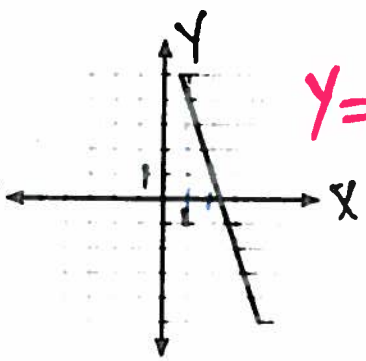
$y = 2$

15)



$y = \frac{-2}{3}x + \frac{4}{3}$

16)



$y = -3x + 7$

MISS NASSIF

Find b

LINEAR EQUATIONS

Write the equation (y = ax + b) for each line.

1)

(x)	2	4	6	8
(y)	3	7	11	15

$y=2x-1$

2)

(x)	0	2	4	6
(y)	0	6	12	18

$y=3x$

3)

(x)	-8	-6	-4	-2
(y)	9	7	5	3

$y=-1x+1$

4)

(x)	1	2	3	4
(y)	10	20	30	40

$y=10x$

5)

(x)	3	4	5	6
(y)	14	17	20	23

$y=3x+5$

6)

(x)	4	8	12	16
(y)	1	2	3	4

$y=1/4x$

7)

(x)	6	10	14	18
(y)	3	5	7	9

$y=1/2x$

8)

x)	2	4	6	8
(y)	19	23	27	31

$y=2x+15$

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Linear Equations
Converting from Functional to General Form

Convert each of the following equations to the general form
$ax + by + c = 0$

Remember
- 'a' cannot be negative
- Keep the order x, y, #
- No Fractions allowed

1) $y = 2x + 4$
$2x - y + 4 = 0$

2) $y = \frac{-3}{5}x - 6$
$3x + 5y + 30 = 0$

3) $y = \frac{-2}{7}x + 2$
$2x + 7y - 14 = 0$

4) $y = \frac{2}{5}x - 4$
$2x - 5y - 20 = 0$

5) $y = \frac{3}{5}x + 10$
$3x - 5y + 50 = 0$

6) $y = \frac{1}{5}x - 7$
$x - 5y - 35 = 0$

7) $y = \frac{2}{8}x + 11$
$2x - 8y + 88 = 0$

8) $y = \frac{-3}{8}x - 1$
$3x + 8y + 8 = 0$

9) $y = \frac{4}{5}x + 1$
$4x - 5y + 5 = 0$

10) $y = 3x + 1$
$3x - y + 1 = 0$

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LINEAR EQUATIONS

Write each equation in functional form (y = ax + b).

1) $3y + 2x = 9$ $y = -\frac{2}{3}x + 3$

2) $4x - 8 = 2y$ $y = 2x - 4$

3) $-3x - 10 = 2y$ $y = -\frac{3}{2}x - 5$

4) $5x + 6y = 30$ $y = -\frac{5}{6}x + 5$

5) $2x - y = 1$ $y = 2x - 1$

6) $x + 2y = -8$ $y = -\frac{1}{2}x - 4$

7) $8x + 3y = -9$ $y = \frac{8}{3}x - 3$

8) $4x + 5y = -10$ $y = -\frac{4}{5}x - 2$

9) $x - y = -2$ $y = 1x + 2$

10) $4x - 3y = 9$ $y = \frac{4}{3}x - 3$

11) $3x + 2y = 6$ $y = \frac{-3}{2}x + 3$

12) $4x - 5y = 0$ $y = \frac{4}{5}x$

13) $y = -1 + 2y$ $y = 1$

14) $x + 5y = -15$ $y = -\frac{1}{5}x - 3$

15) $-2y - 10 + 2x = 0$ $y = 1x - 5$

16) $x + 5 + y = 0$ $y = -1x - 5$

17) $3x + 20 = -4y$ $y = \frac{-3}{4}x - 5$

18) $-15 - x = -5y$ $y = \frac{1}{5}x + 3$

19) $-1 = -2x + y$ $y = 2x - 1$

20) $-x - 1 = y + 3$ $y = -1x - 4$

21) $0 = 5y - x$ $y = \frac{1}{5}x$

22) $-30 + 10y = -2x$ $y = -1/5x + 3$

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LINEAR EQUATIONS

Complete the table.

General Equation	Linear Function	Slope	Y Intercept
$4x - 5y + 10 = 0$	$y = 4/5\,x + 2$	$4/5$	2
$x + 2y - 6 = 0$	$y = -\frac{x}{2} + 3$	$-1/2$	3
$+3x + 6y - 54 = 0$	$y = -1/2\,x + 9$	$-1/2$	9
~~$3x + 2y = 0$ $2y + 3x = 0$~~	$y = -\frac{3x}{2}$	~~$-3/2$~~ ~~0~~	~~$-3/2$~~ 0
$2x - y = 0$	$y = 2x$	2	0
$2x + y + 50 = 0$	$y = -2x - 50$	-2	-50
$2x - y + 3 = 0$	$y = 2x + 3$	2	3
$20x - y + 80 = 0$	$y = 20x + 80$	20	80
$30x + 60y - 120 = 0$	$y = -1/2\,x + 2$	$-1/2$	2
$15x - y - 6 = 0$	$y = 15x - 6$	15	-6
$20x + 50y - 100 = 0$	$y = -2/5\,x + 2$	$-2/5$	2
$3x - 4y - 4 = 0$	$y = \frac{3}{4}x - 1$	$3/4$	-1
$4x - y + 5 = 0$	$y = 4x + 5$	4	5
$2x - 5y + 10 = 0$	$y = 2/5\,x + 2$	$2/5$	2
$+2x + 4y - 8 = 0$	$y = -1/2\,x + 2$	$-1/2$	2

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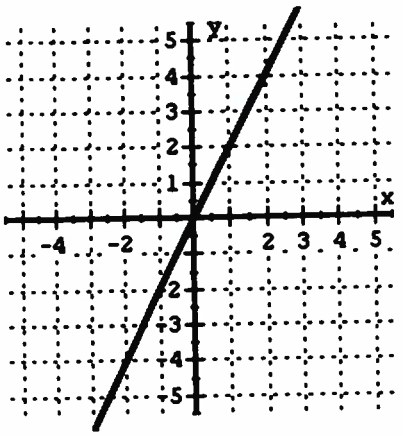
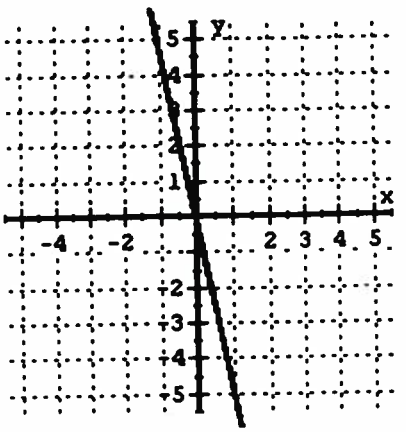
LINEAR EQUATIONS

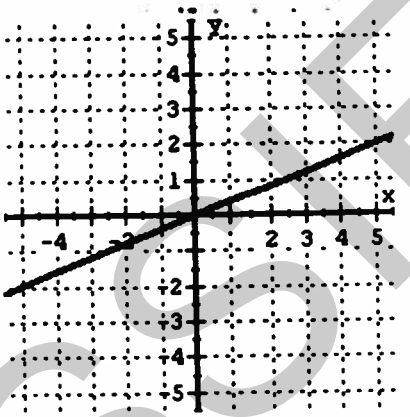
Graph each equation on the Cartesian plane.



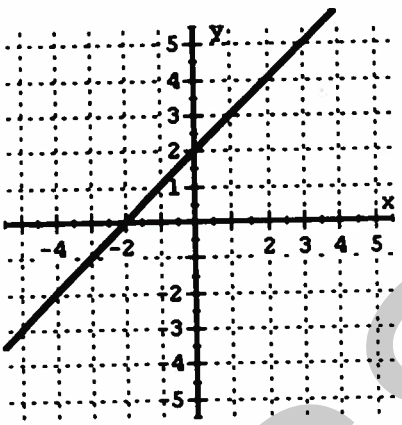
1) $y = 2x$



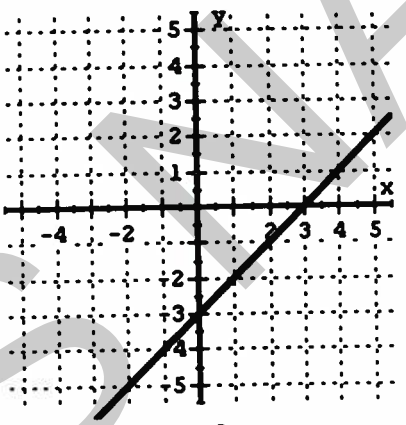
2) $y = -5x$



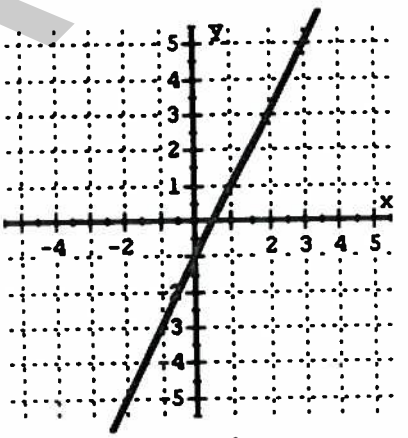
3) $y = \frac{2}{5}x$



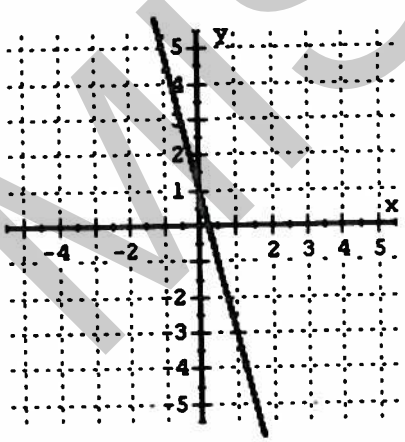
4) $y = x + 2$



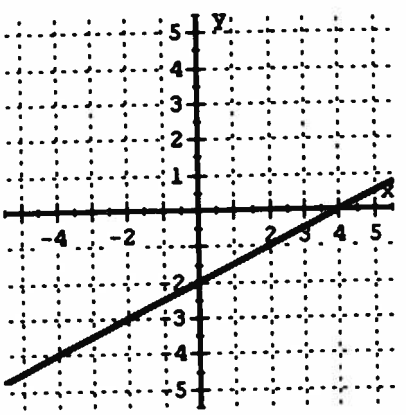
5) $y = x - 3$



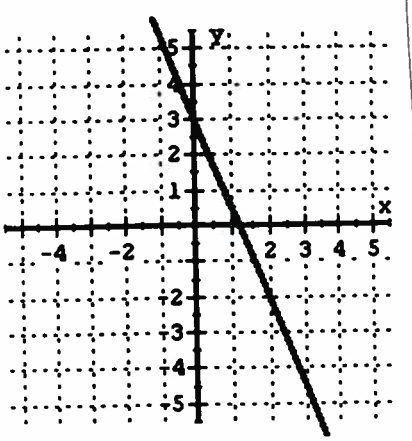
6) $y = 2x - 1$



7) $y = -4x + 1$



8) $y = \frac{1}{2}x - 2$



9) $y = -\frac{5}{2}x + 3$

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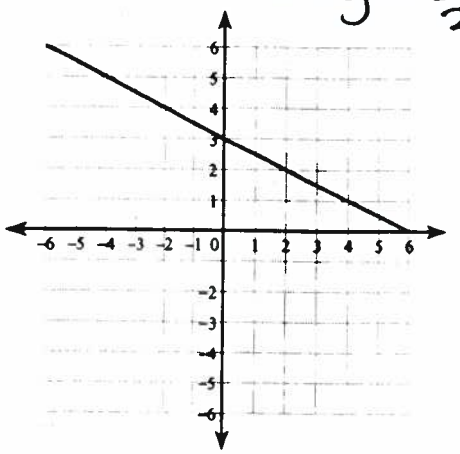
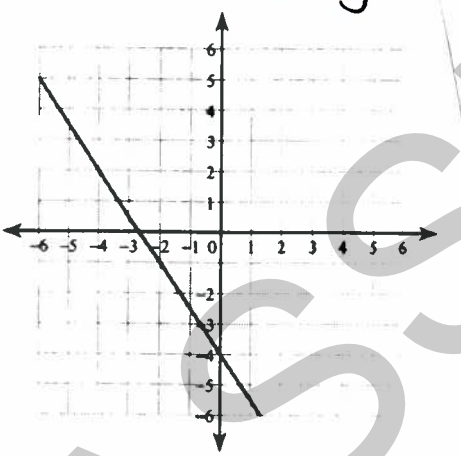
Graphing Lines

Sketch the graph of each line.

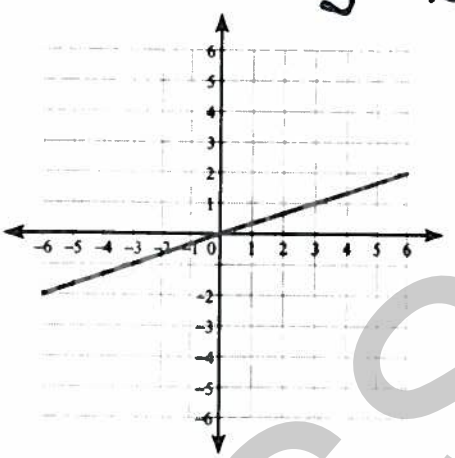
1) $x + 2y = 6$ → $y = -\frac{x}{2} + 3$



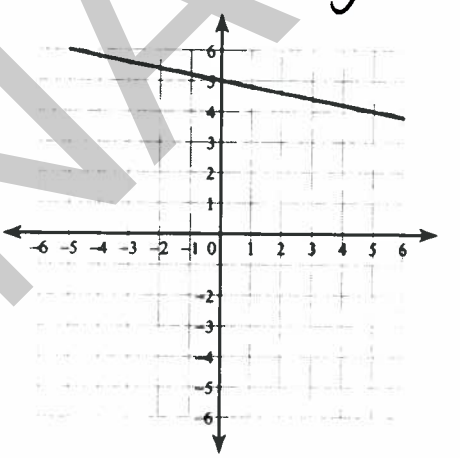
2) $3x + 2y = -8$ → $y = -\frac{3x}{2} - 4$



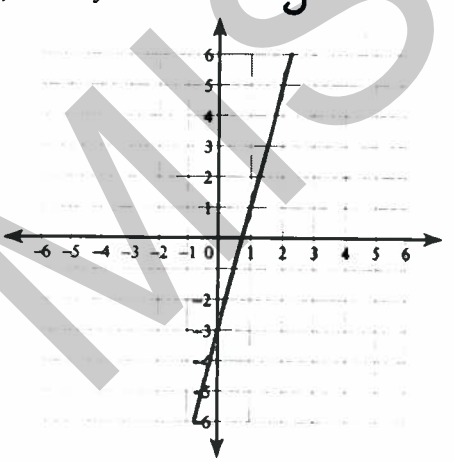
3) $x - 3y = 0$ → $y = x/3$



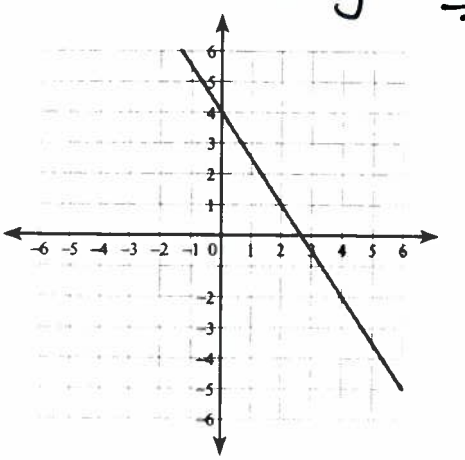
4) $x + 5y = 25$ → $y = -\frac{x}{5} + 5$



5) $4x - y = 3$ → $y = 4x - 3$



6) $3x + 2y = 8$ → $y = -\frac{3x}{2} + 4$



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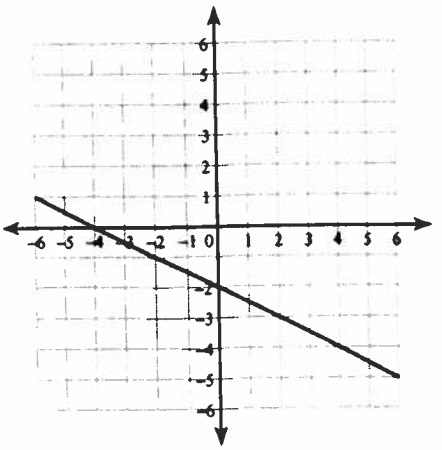
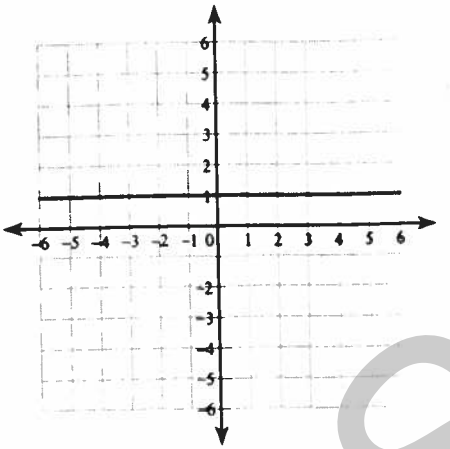
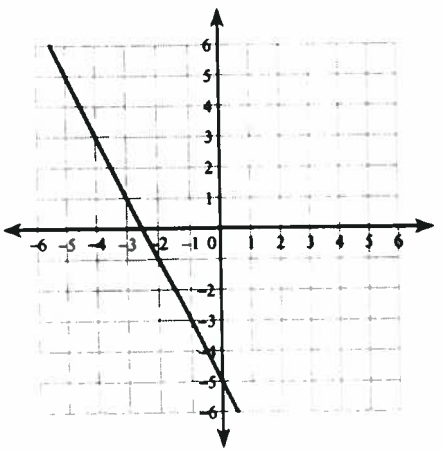
7) $x + 2y = -4$



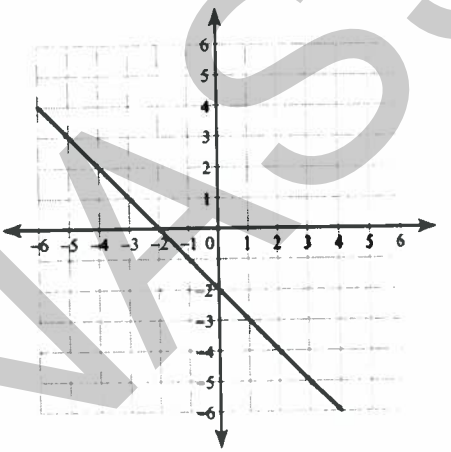
8) $y = 1$



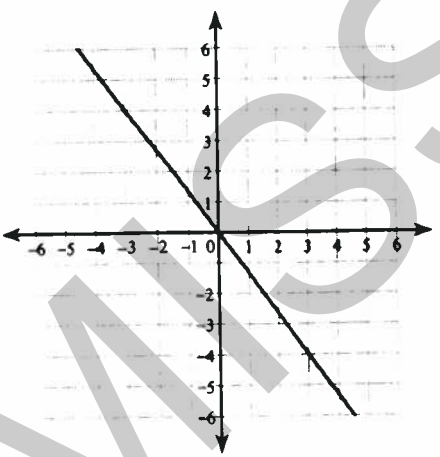
9) $2x + y = -5$



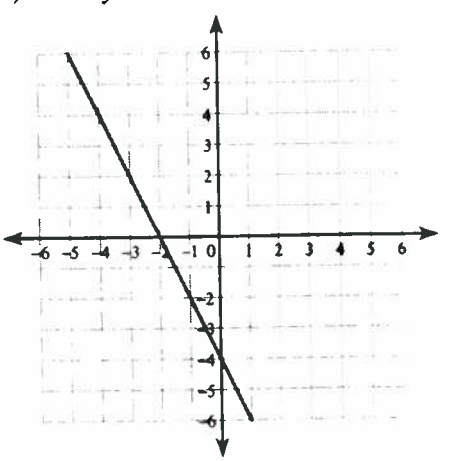
10) $x + y = -2$



11) $4x + 3y = 0$



12) $2x + y = -4$



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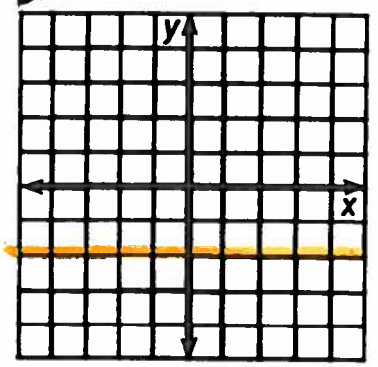
Graph each equation below.

1) $y = -2$



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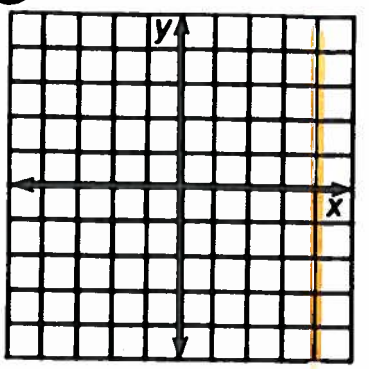
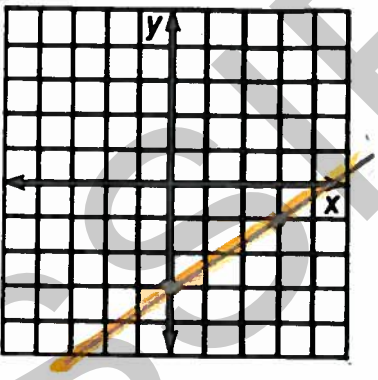
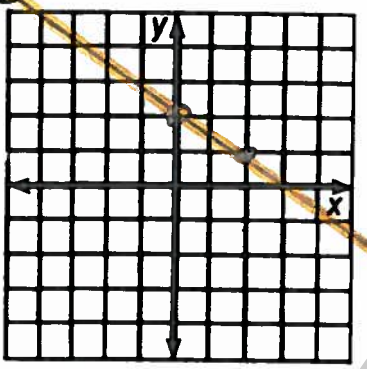
2) $x = 4$



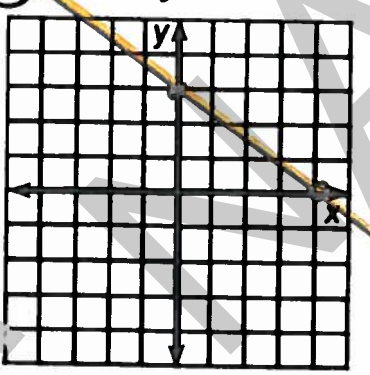
3) $2x - 3y = 9$



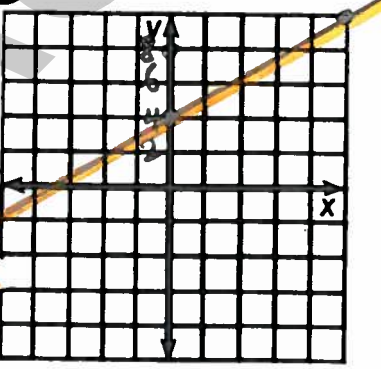
4) $x + 2y - 4 = 0$



5) $3x + 4y = 12$



6) $6x - 5y + 20 = 0$



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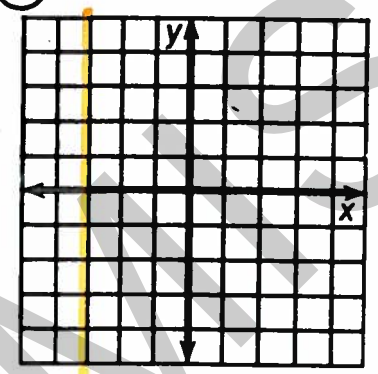
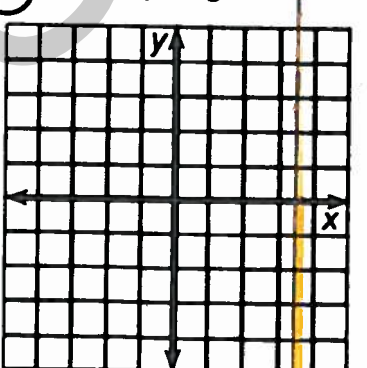
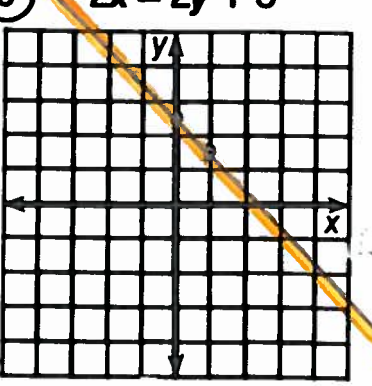
7) $x + 3 = 0$



8) $2x - 7 = 0$



9) $-2x = 2y + 5$



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LINEAR EQUATIONS

Find the x and y- intercepts for each line.

1) $y = -\frac{5}{2}x - 5$ -2, -5

2) $y = -\frac{4}{3}x - 1$ -3/4, -1

3) $y = -x + 3$ 3, 3

4) $y = -4x - 1$ -1/4, -1

5) $2x - y = 1$ 1/2, -1

6) $x + 2y = -8$ -8, -4

7) $8x + 3y = -9$ -9/8, -3

8) $4x + 5y = -10$ -5/2, -2

9) $x - y = -2$ -2, 2

10) $4x - 3y = 9$ 9/4, -3

11) $3x + 2y = 6$ 2, 3

12) $4x - 5y = 0$ 0, 0

13) $y = -1$ NONE, -1

14) $x + 5y = -15$ -15, -3

15) $-2x - 10 + 2x = 0$ 5, -5

16) $x + 5 + y = 0$ -5, -5

17) $3x + 20 = -4y$ $\frac{-20}{3}$, -5

18) $-15 - x = -5y$ -15, 3

19) $-1 = -2x + y$ 1/2, -1

20) $-x - 1 = y$ -1, -1

21) $0 = 5y - x$ 0, 0

22) $-30 + 10y = -2x$ 15, 3

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X AND Y INTERCEPTS

Find both X and Y intercepts of the equation. Show all work!!

1. $4x + y = 5$

$\frac{5}{4}, 5$

2. $x - y = 1$

$1, -1$

3. $x + 4y = 8$

$8, 2$

4. $5x + y = 2$

$\frac{2}{5}, 2$

5. $7x + 3y = -21$

$-3, -7$

6. $3x + 6y = 18$

$6, 3$

7. $4x + y = -8$

$-2, -8$

8. $x - 2y = -10$

$-10, 5$

9. $6x + 4y = 12$

$2, 3$

10. $x - 9y = -45$

$-45, 5$

11. $2x - 6y = 18$

$9, -3$

12. $7x + 5y = 42$

$6, 8.4$

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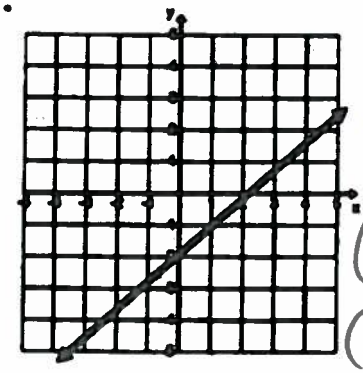
X and Y Intercepts Worksheet

Identify the x and y intercepts and write as an ordered pair

1.

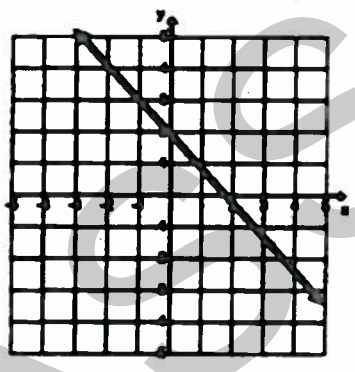


2, -2

(2, 0)

(0, -2)

2.

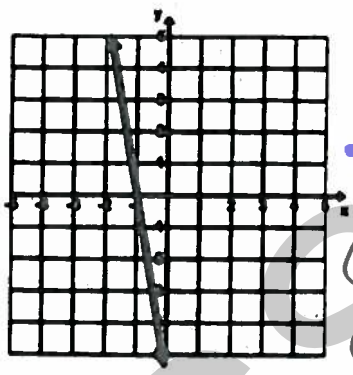


(2, 0)

(0, 2)

2, 2

3.

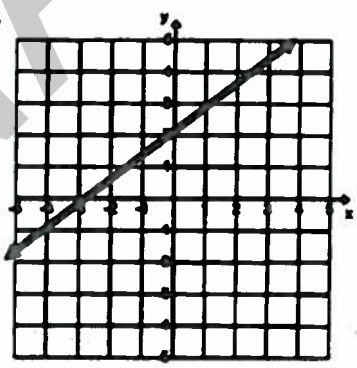


-1, 5

(-1, 0)

(0, 5)

4.

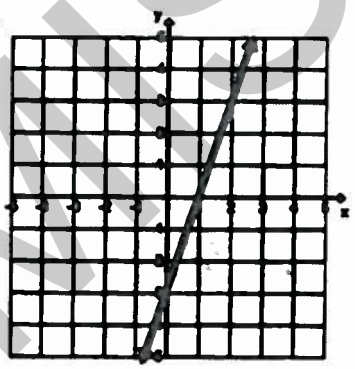


-3, 2

(-3, 0)

(0, 2)

5.

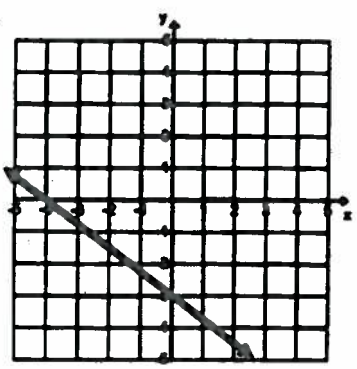


1, -3

(1, 0)

(0, -3)

6.



-4, -3

(-4, 0)

(0, -3)

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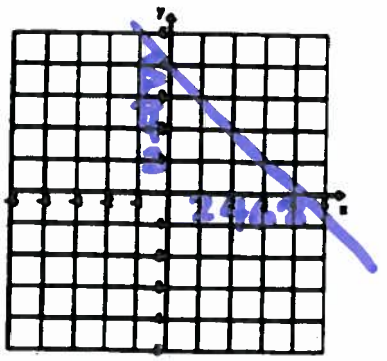
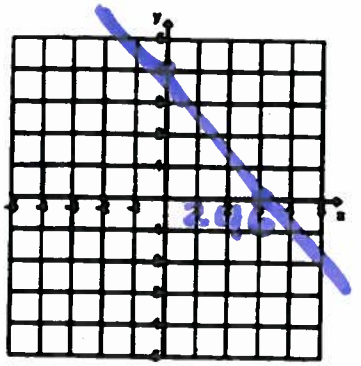
X AND Y- INTERCEPTS

Graph the following equations by plotting the x and y-intercepts and then drawing the line through the 2 points.

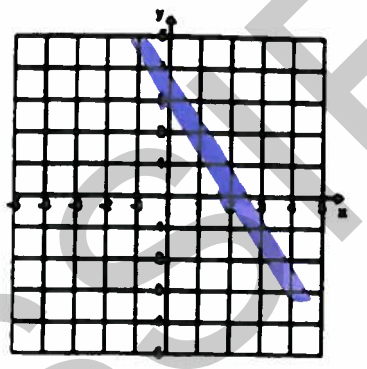
1. $x + y = 8$



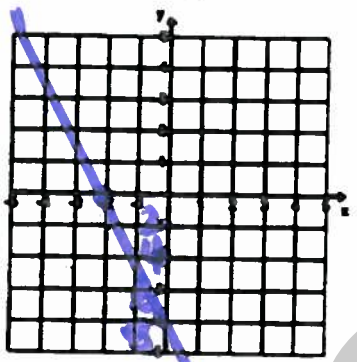
2. $2x + 3y = 12$



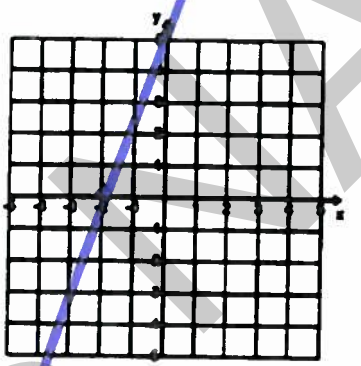
3. $6x + 4y = 12$



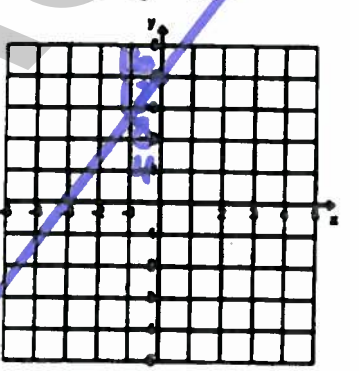
4. $4x + y = -8$



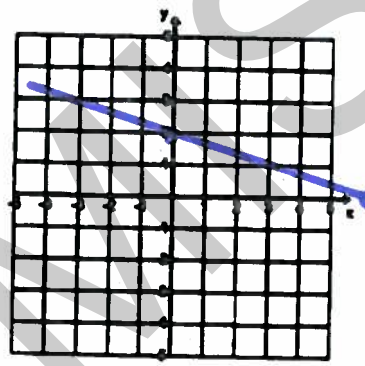
5. $5x - 2y = -10$



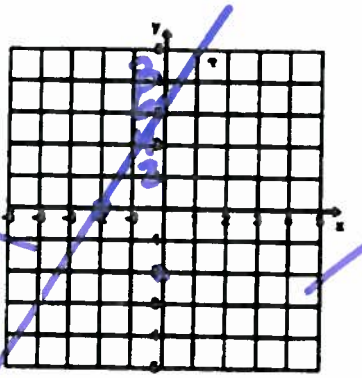
6. $x - 4y = 16$



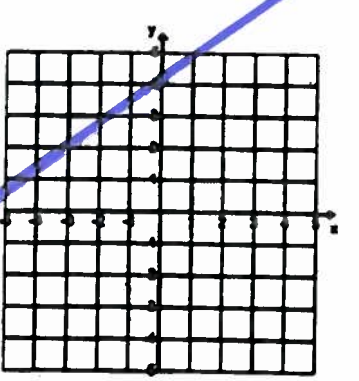
7. $-3x - 9y = -18$



8. $7x - 2y = -14$



9. $-10x + 15y = 60$

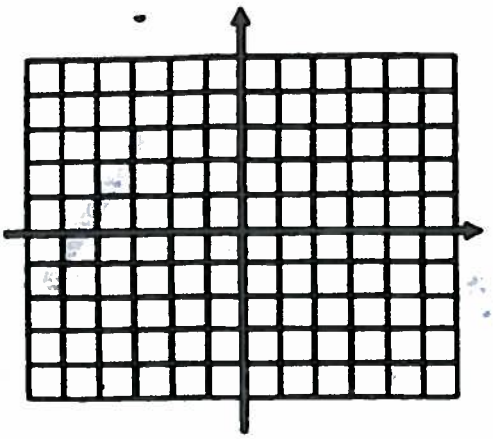


MISSING SELF

INEQUALITIES

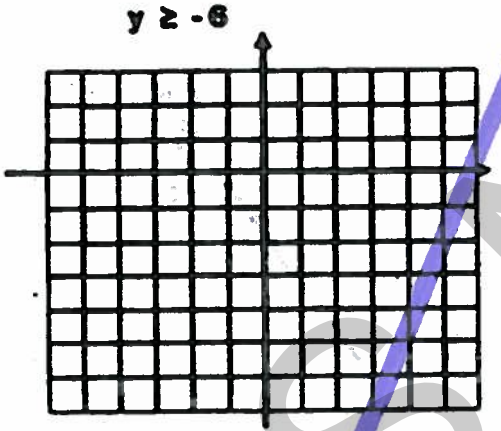
Graph the inequality.

$y \geq 3$

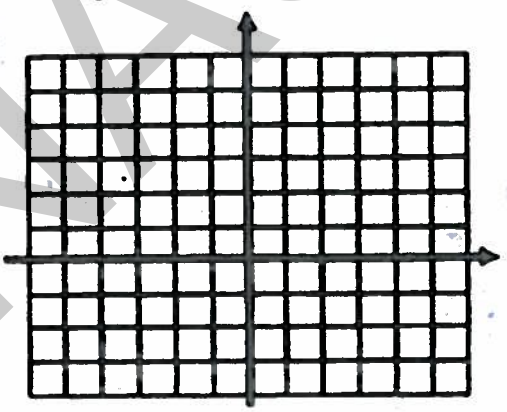


Exercise: Plot the following inequalities

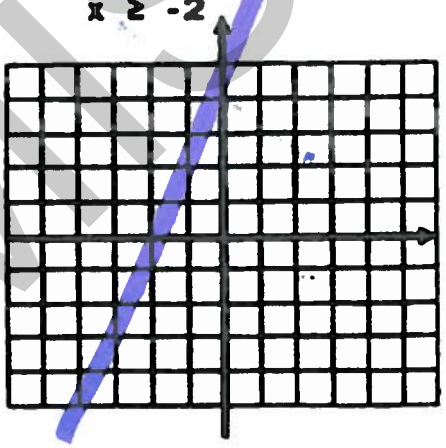
1) $y \geq -6$



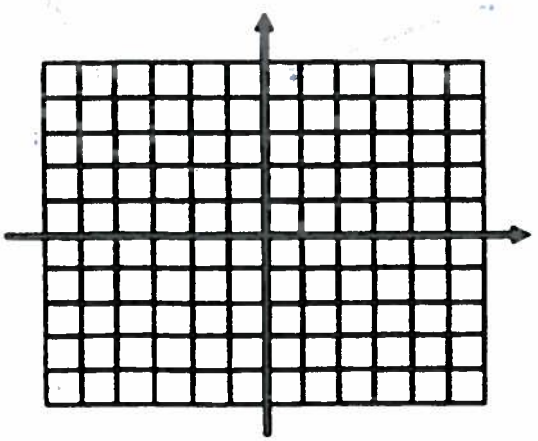
2) $x < 4$



3) $x \geq -2$



4) $y \geq -1$

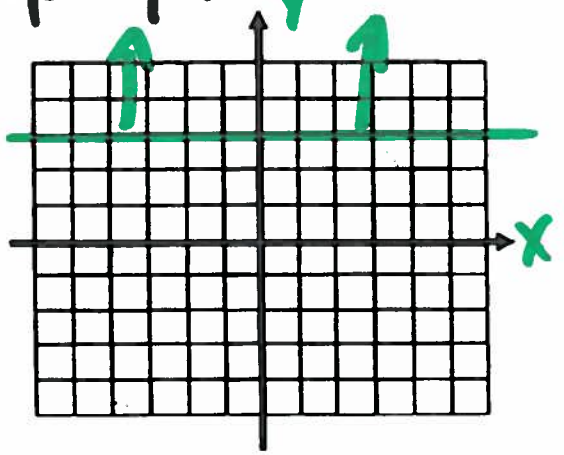


MISSNASSIF

Solution Key.

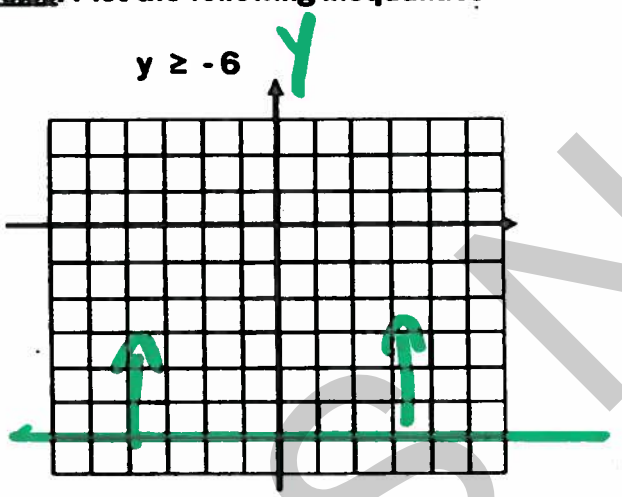
INEQUALITIES

Graph $y \geq 3$

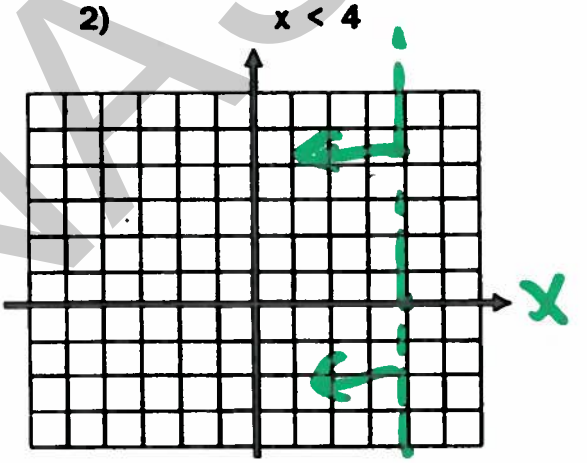


Exercise: Plot the following inequalities

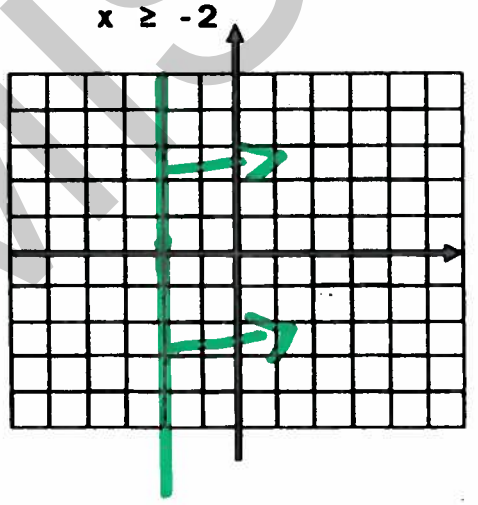
1) $y \geq -6$



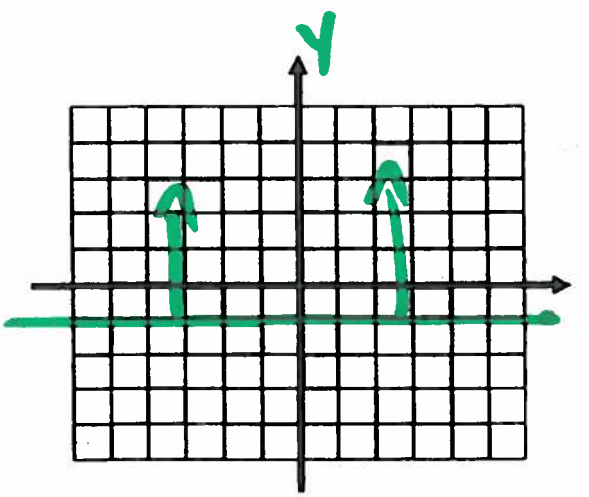
2) $x < 4$



3) $x \geq -2$



4) $y \geq -1$



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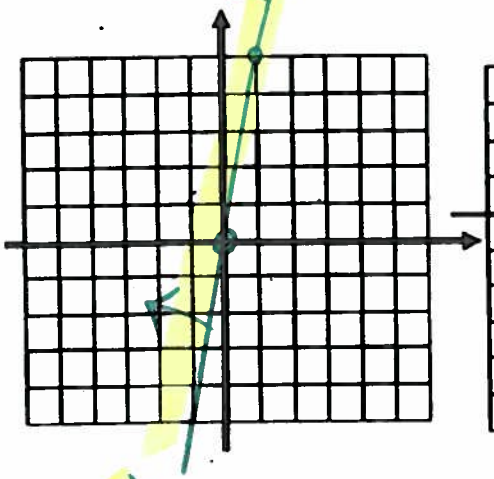
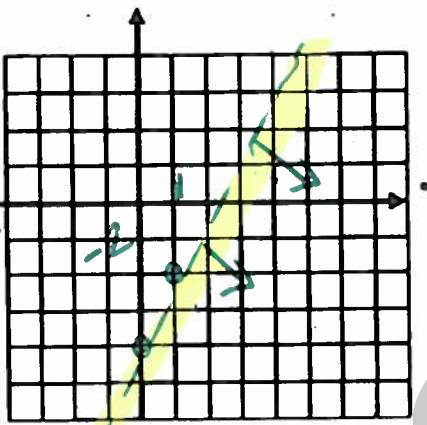
GRAPH

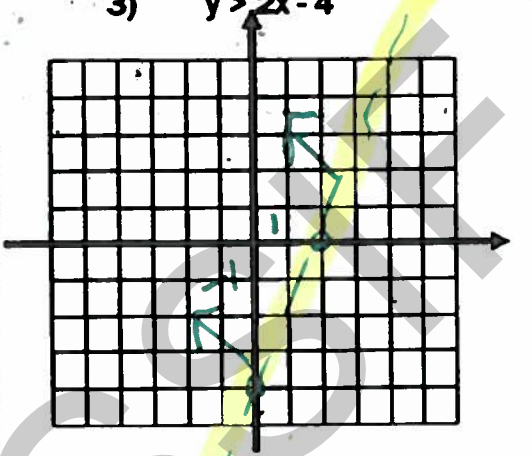
1) $y \geq 5x$



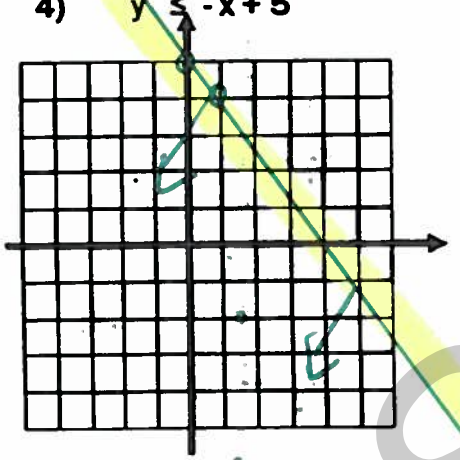
2) $y < 4x - 8$



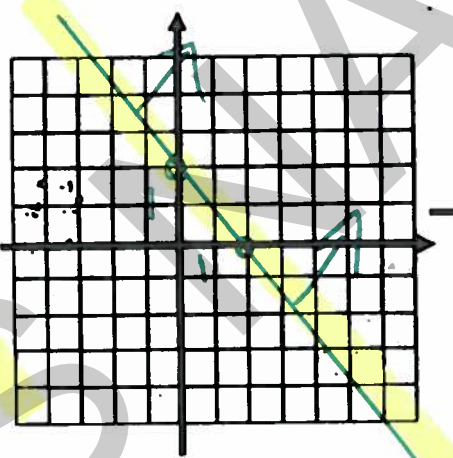
3) $y > 2x - 4$



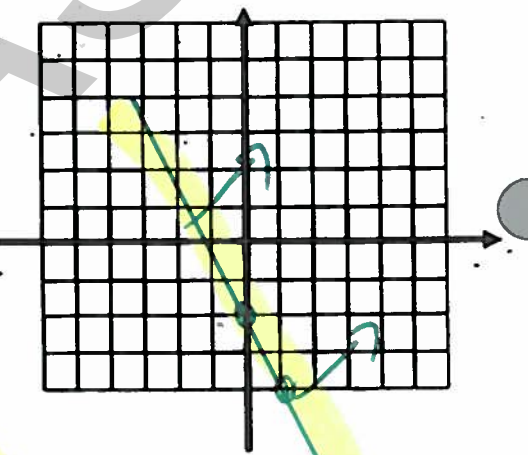
4) $y \leq -x + 5$



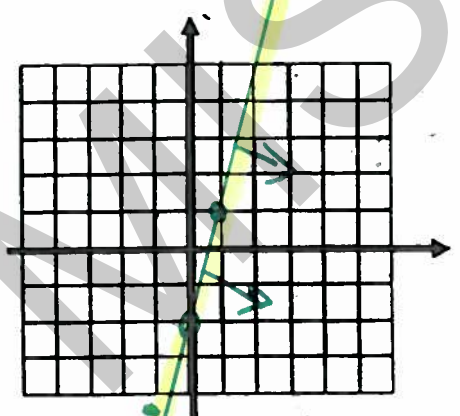
5) $y \geq -x + 2$



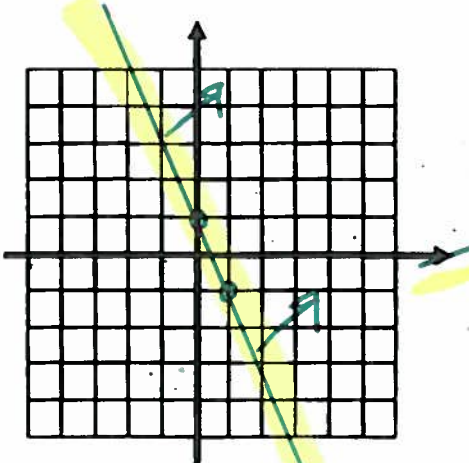
6) $y \geq -2x - 2$



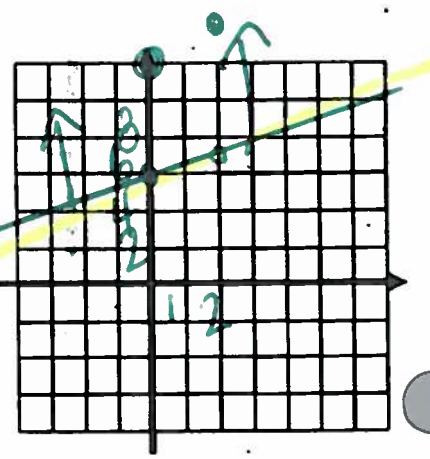
7) $y \leq 3x - 2$



8) $y \geq -2x + 1$

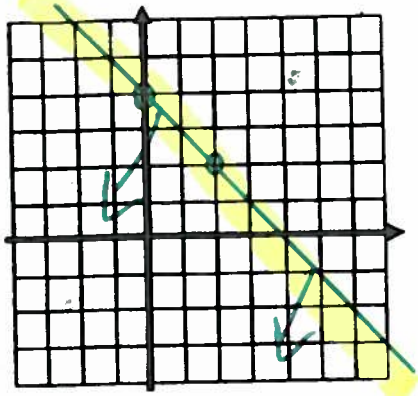


9) $y \geq \frac{1}{2}x + 6$

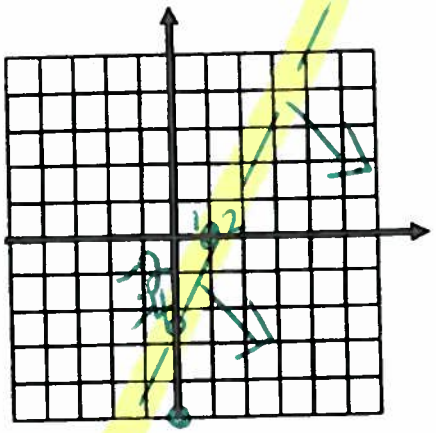


WISSNASIUM

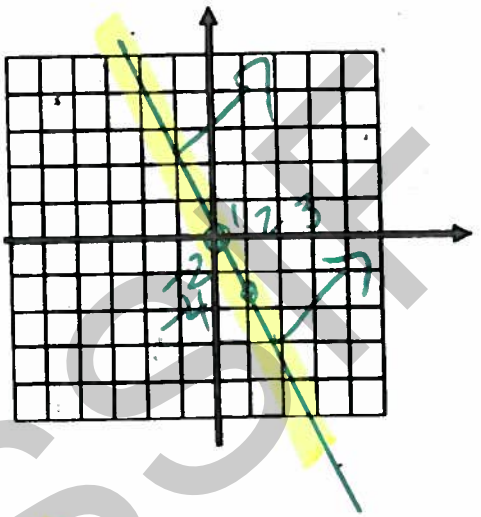
10) $y \leq -x + 4$



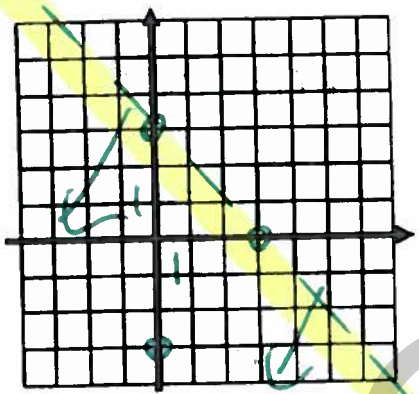
11) $y < 5x - 5$



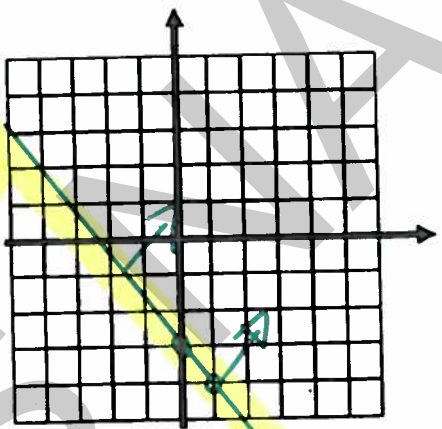
12) $y \geq -3x$



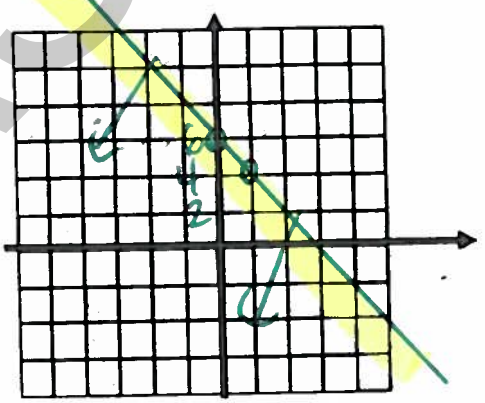
13) $y < -x + 3$



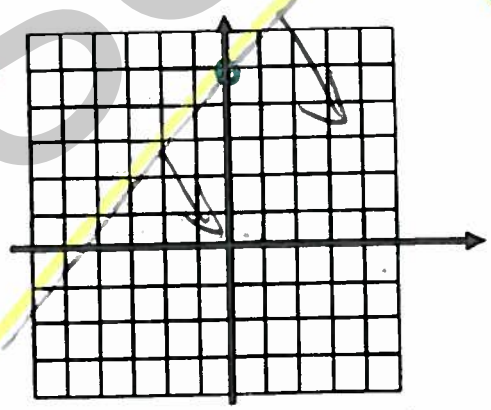
14) $y \geq -x - 3$



15) $y \leq -2x + 6$



16) $y \leq x + 5$

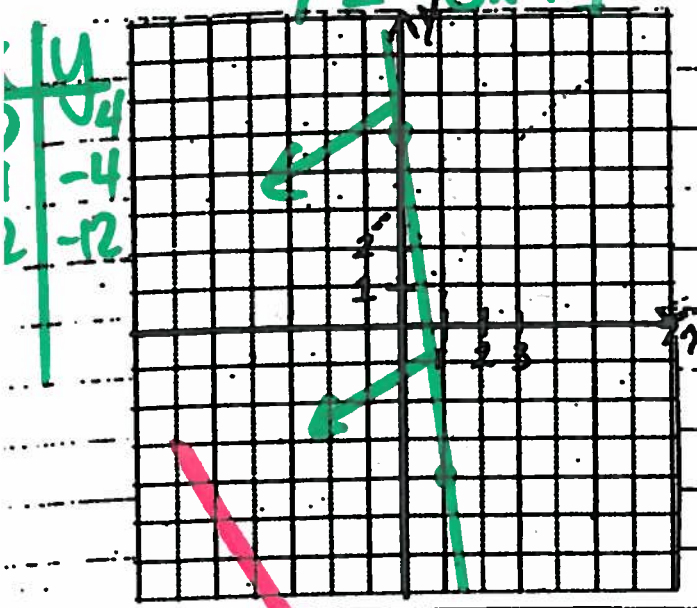


MISS MASSEY

DIVIDING BY NEGATIVE

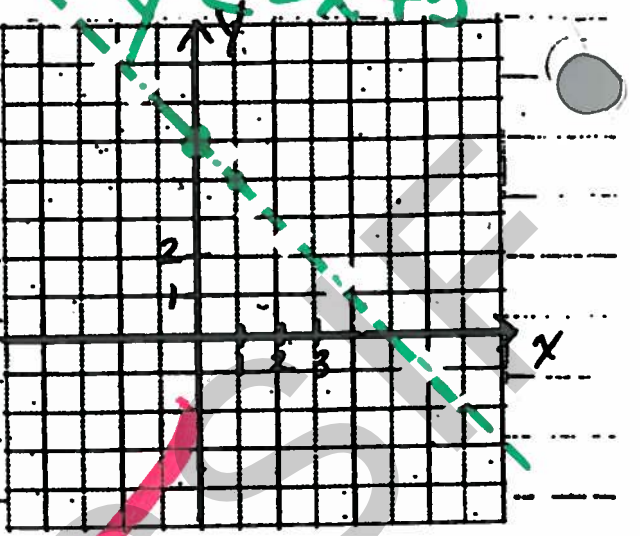
3) $-3y \geq 24x - 12$

$y \leq -8x + 4$



4) $2y < -2x + 10$

$y < -x + 5$

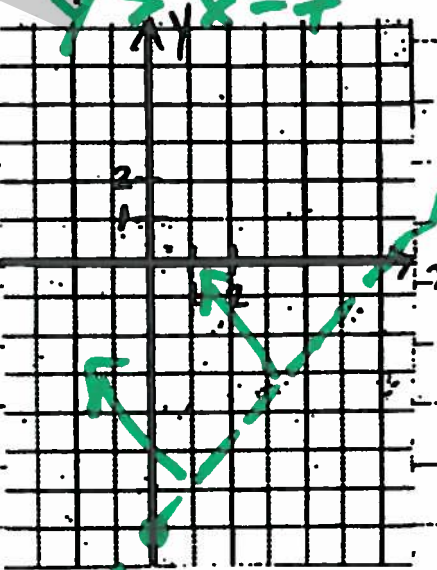


5) $-6x + 2y \geq -4$

$y \geq 3x - 2$

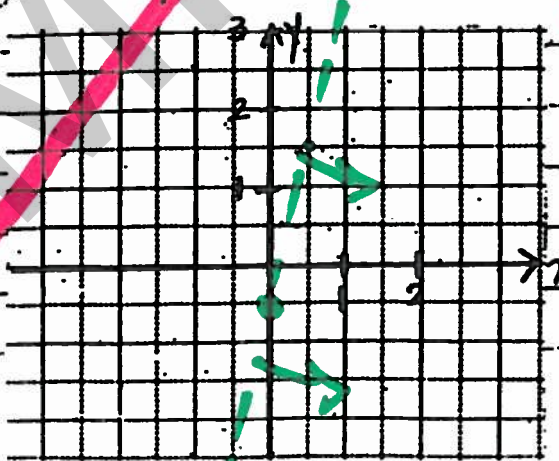
6) $-y < -x + 7$

$y > x - 7$



7) $-4y > -8x + 2$

$y < 2x - 0.5$



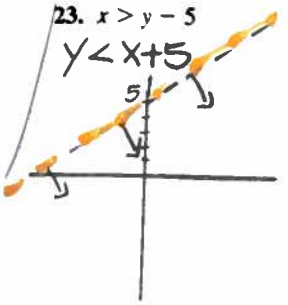
MISSNASSIF

INEQUALITIES

Graph the inequality.

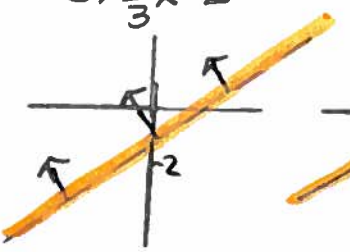
23. $x > y - 5$

$y < x + 5$



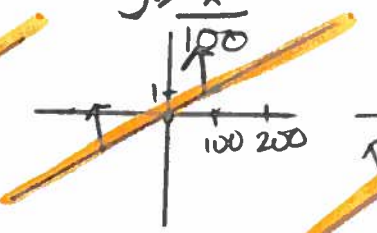
24. $2x < 3y + 6$

$y > \frac{2}{3}x - 2$

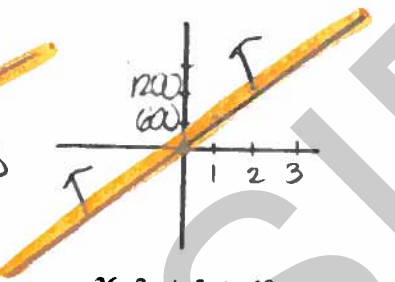


33. $x \leq 100y$

$y \geq \frac{x}{100}$



34. $y \geq 600x$

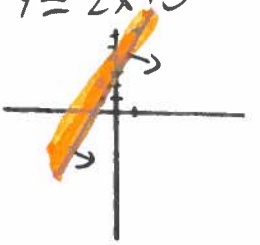


25. $x - 2y + 4 \leq 0$

$y \geq \frac{x}{2} + 2$

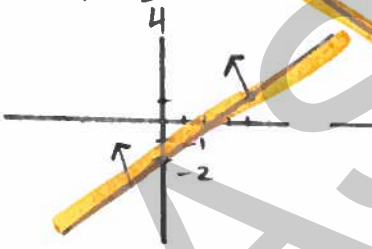
26. $2x - y + 3 \geq 0$

$y \leq 2x + 3$



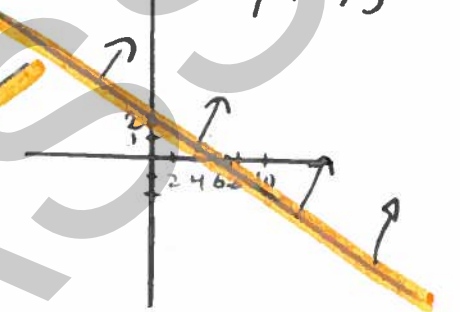
35. $3x - 4y \leq 8$

$y \geq \frac{3}{4}x - 2$

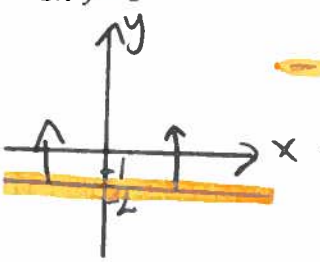


36. $2x + 5y \geq 10$

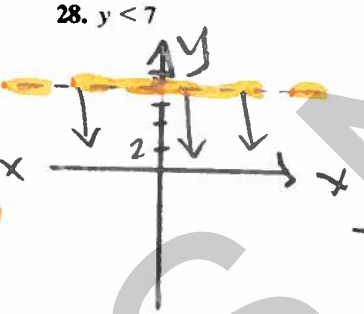
$y \geq -\frac{2}{5}x + 2$



27. $y \geq 2$

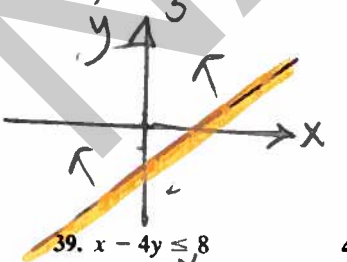


28. $y < 7$



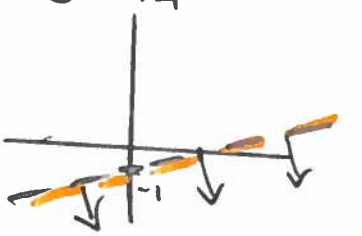
37. $2x - 3y < 6$

$y > \frac{2}{3}x - 2$

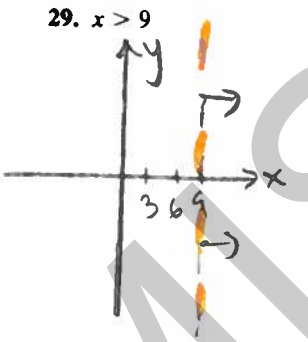


38. $x - 4y > 4$

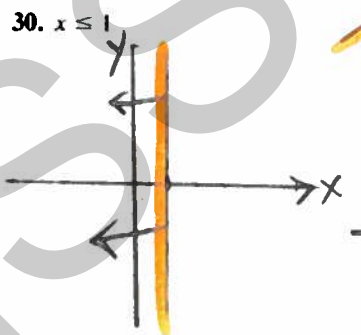
$y < \frac{x}{4} - 1$



29. $x > 9$

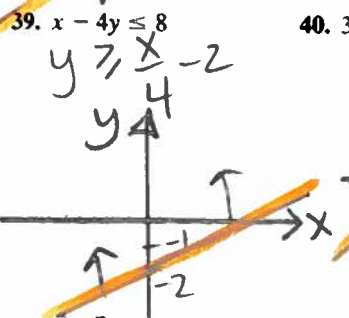


30. $x \leq 1$

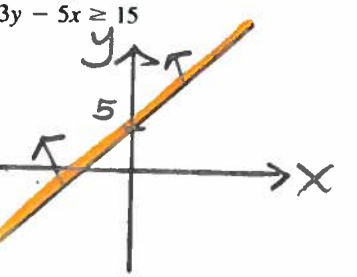


39. $x - 4y \leq 8$

$y \geq \frac{x}{4} - 2$

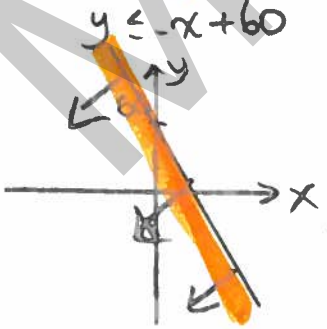


40. $3y - 5x \geq 15$



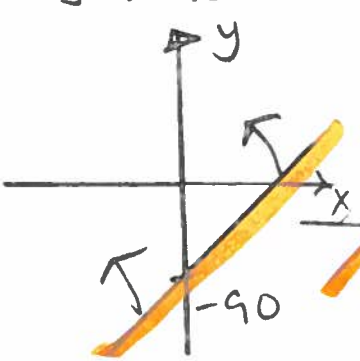
31. $x + y \leq 60$

$y \leq -x + 60$



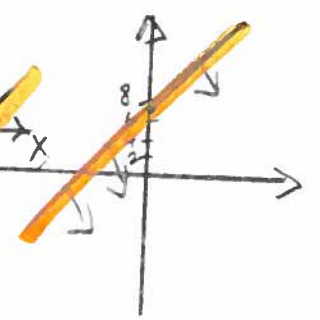
32. $x - y \leq 90$

$y \geq x - 90$



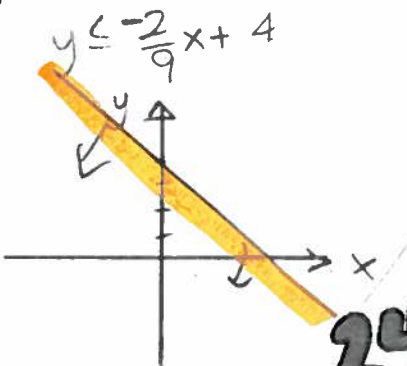
41. $y - \frac{7}{2}x \leq 7$

$y \leq \frac{7}{2}x + 7$



42. $\frac{2}{3}x + 3y \leq 12$

$y \leq -\frac{2}{9}x + 4$



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INEQUALITIES

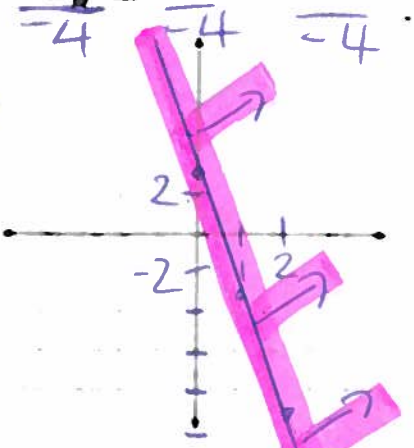
Graph each inequality. Watch out; you may be dividing by a negative!

1) $-4y \geq 24x - 12$

$\frac{-4y}{-4} \geq \frac{24x}{-4} - \frac{12}{-4}$

$y \leq -6x + 3$

x	y
0	3
1	-3
2	-9

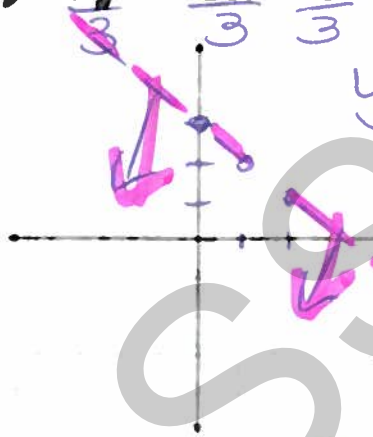


2) $3y < -3x + 9$

$\frac{3y}{3} < \frac{-3x}{3} + \frac{9}{3}$

$y < -1x + 3$

x	y
0	3
1	2
2	1

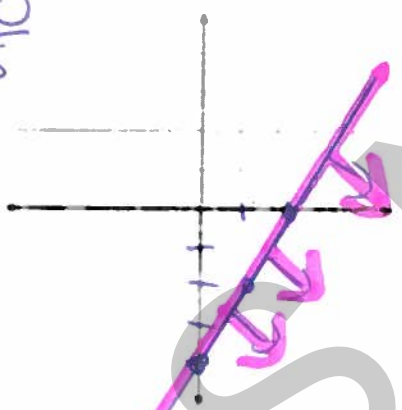


3) $-10x + 5y \leq -20$

$\frac{5y}{5} \leq \frac{10x}{5} - \frac{20}{5}$

$y \leq 2x - 4$

x	y
0	-4
1	-2
2	0

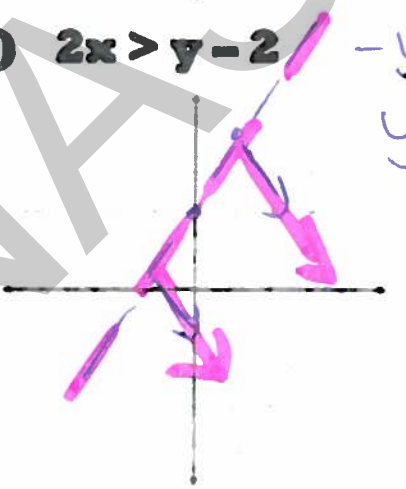


4) $2x > y - 2$

$-y > -2x - 2$

$y < 2x + 2$

x	y
0	2
1	4
2	6

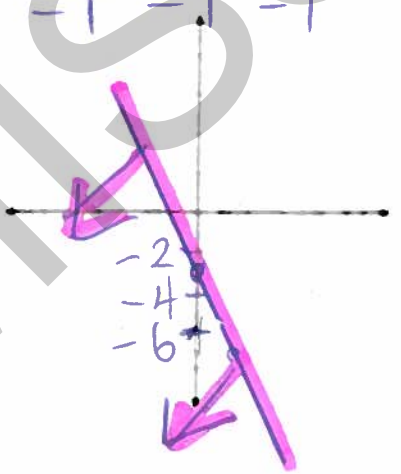


5) $-1y \leq 4x + 3$

$\frac{-1y}{-1} \geq \frac{4x}{-1} + \frac{3}{-1}$

$y \geq -4x - 3$

x	y
0	-3
1	-7
2	-11

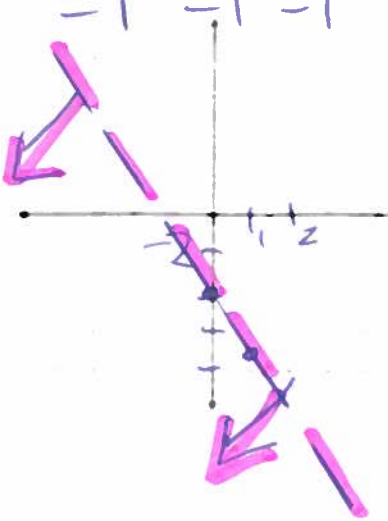


6) $-y > 3x + 4$

$\frac{-y}{-1} < \frac{3x}{-1} + \frac{4}{-1}$

$y < -3x - 4$

x	y
0	-4
1	-7
2	-10



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INEQUALITIES

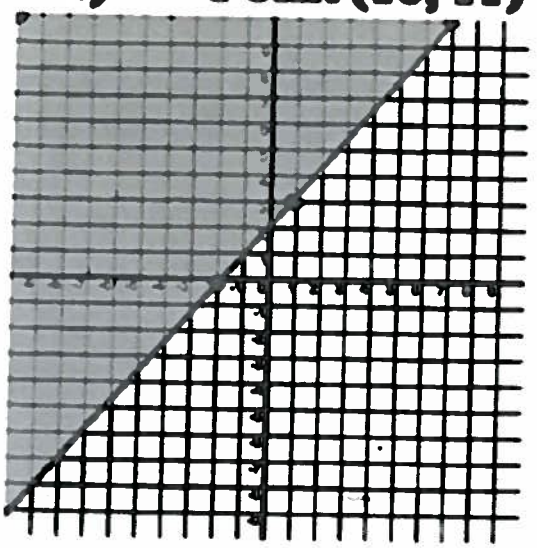
Determine if each point is a solution to the inequality.

1) Point (15, 17)

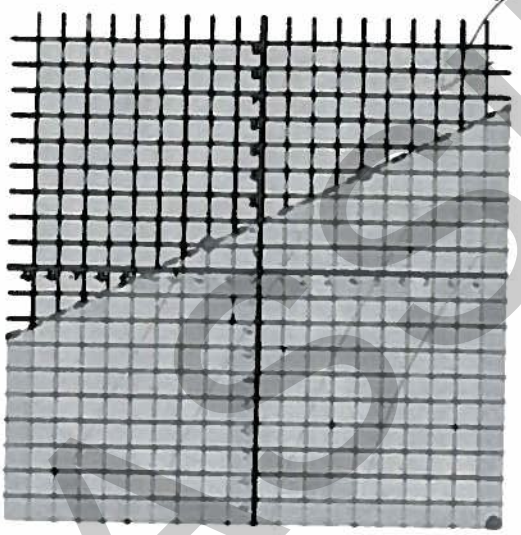
$y \geq x+2$

$7 \geq 15+2$

Yes



2) Point (22, -10) mistake



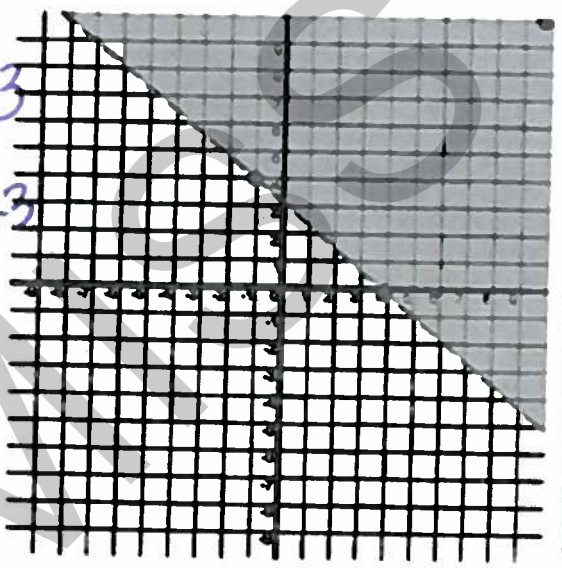
3) Point (20, -19)

$y > -\frac{4}{5}x+3$

$9 > -\frac{4(20)}{5}+3$

$9 > -13$

No



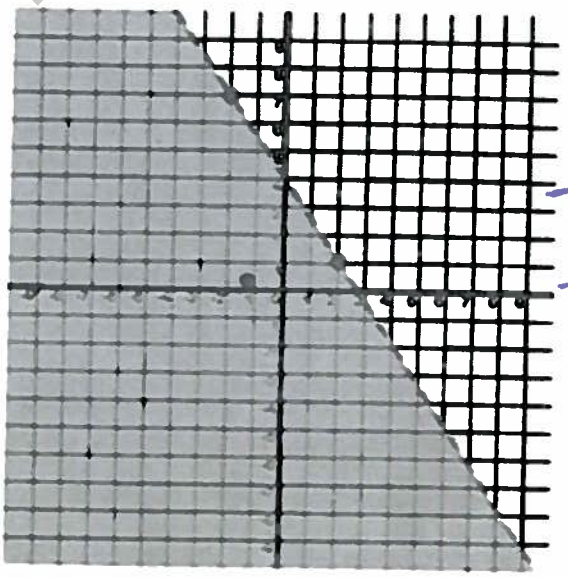
4) Point (10, -11)

$y < -\frac{3}{2}x+4$

$-11 < -\frac{3}{2}(10)+4$

$-11 < -11$

No



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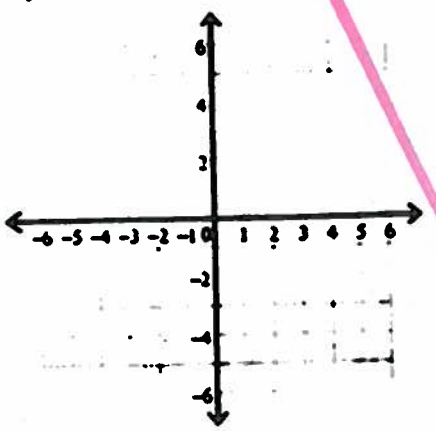
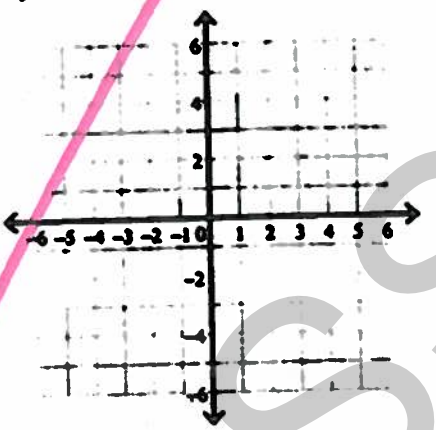
INEQUALITIES

Graph the inequality.

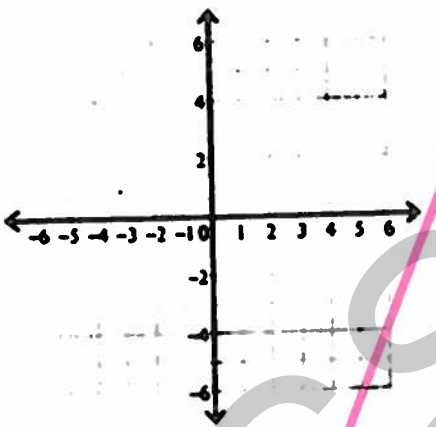
1) $y \geq -2x + 5$



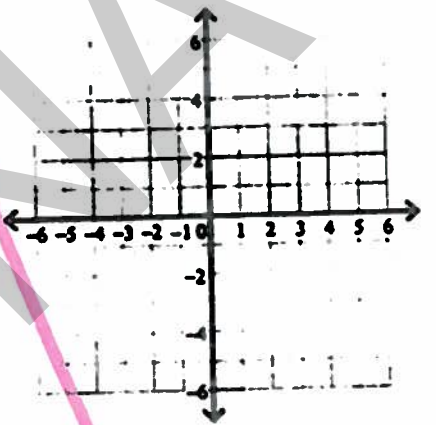
2) $y < 4x + 4$



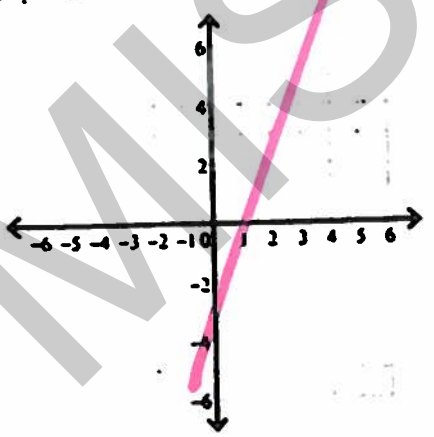
3) $y > -\frac{4}{5}x$



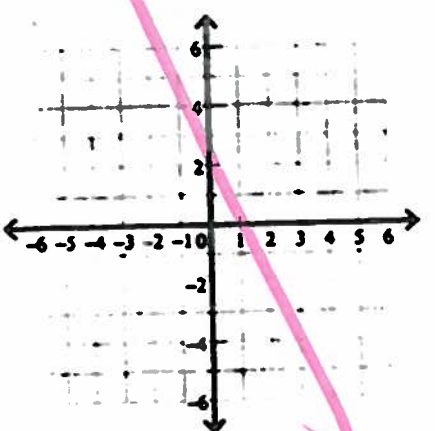
4) $y \geq -x + 1$



5) $y > 1$



6) $y < \frac{7}{3}x - 5$



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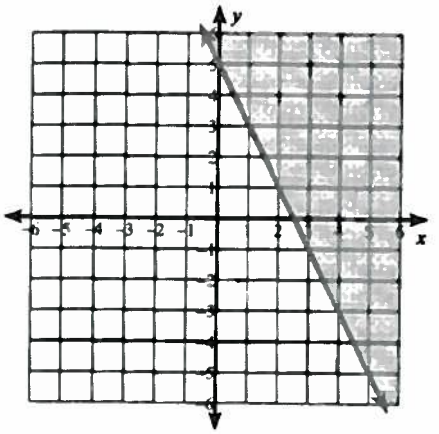
Name_____

Graphing Linear Inequalities

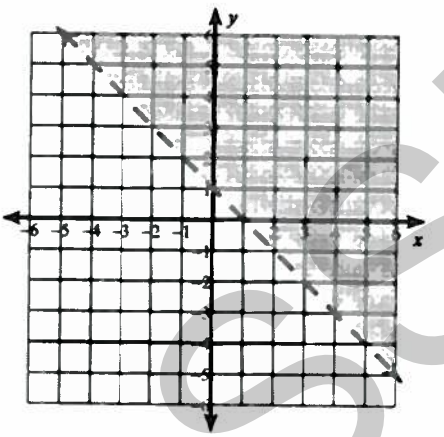
Date_____ Period____

Sketch the graph of each linear inequality.

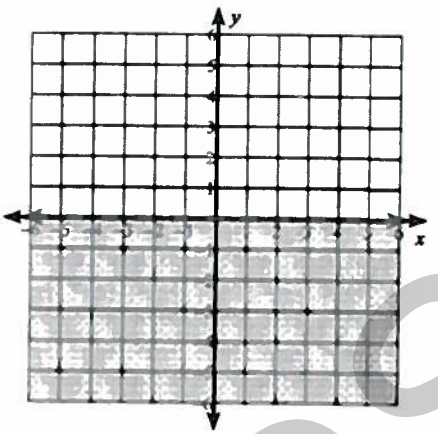
1) $y \geq -2x + 5$



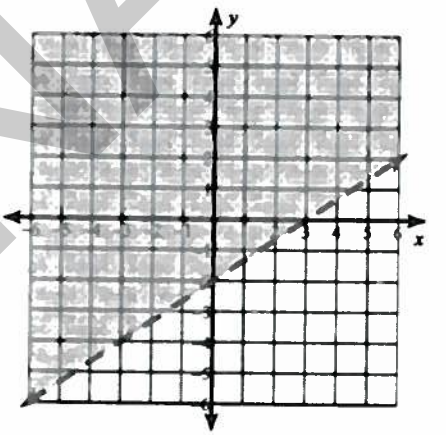
2) $y > -x + 1$



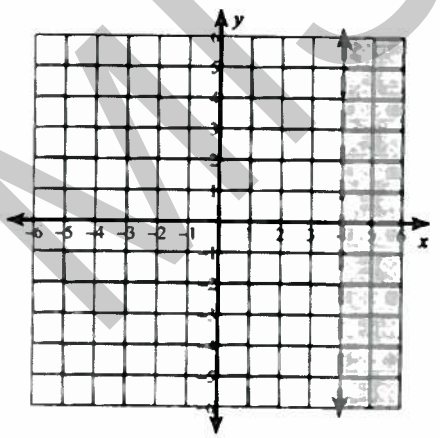
3) $y < 0$



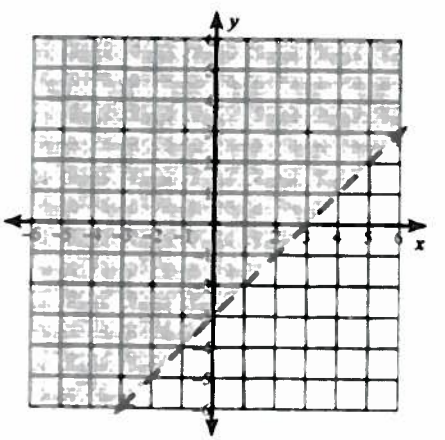
4) $y > \frac{2}{3}x - 2$



5) $x > 4$



6) $y > x - 3$



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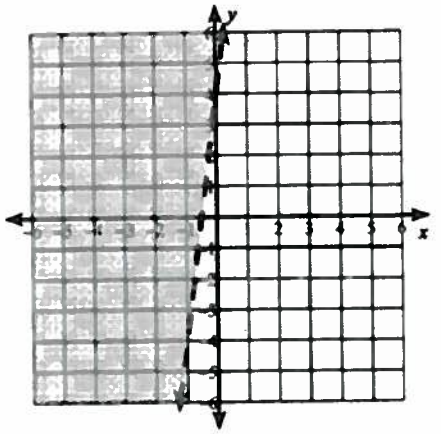
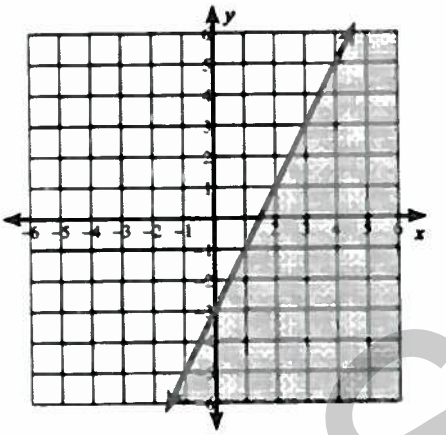
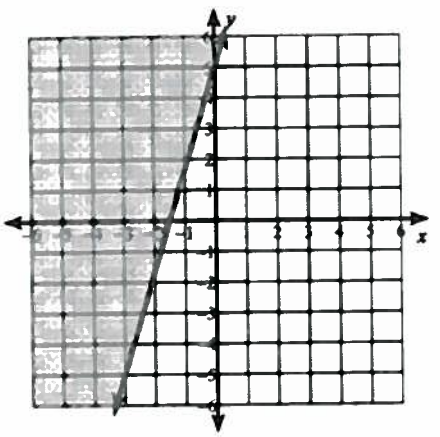
7) $8x - y < -4$



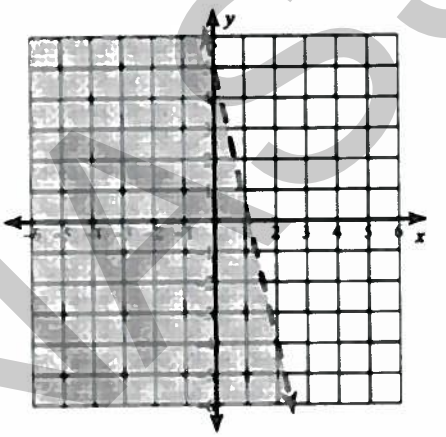
8) $2x - y \geq 3$



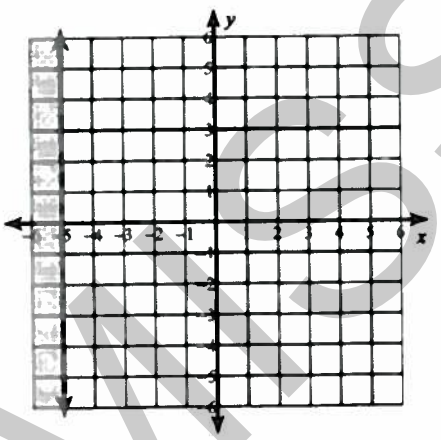
9) $10x - 3y \leq -15$



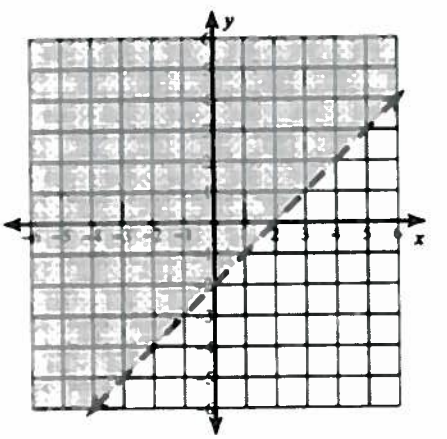
10) $9x + 2y < 10$



11) $x \leq -5$



12) $x - y < 2$



Critical thinking questions:

13) **Name one particular solution to #11**

Any point in the shaded region or boundary. Ex: (0, 0)

14) **Can you write a linear inequality whose solution contains only points with positive x-values and positive y-values? Why or why not?**

No. No line can be in only the 1st quadrant.

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