

New Bedford Public Schools  
Division of Adult & Continuing Education

## **New Bedford High School Evening Extension**

2019 – 2020 School Year  
Trimester III

Learning Packet #2  
for  
**Algebra I**

Teacher: *Mr. Emanuel Alves*  
New Bedford High School Evening Extension  
230 Hathaway Boulevard  
New Bedford, MA 02740  
[egalves@newbedfordschools.org](mailto:egalves@newbedfordschools.org)

Email Mr. Alves with questions/concerns regarding this packet at the email address listed above.

Due date: May 4, 2020



## **NOTE:**

**The Google Class Code**

**for your**

**Algebra I class is:**

**74i52bc**

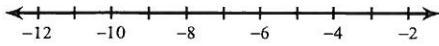
**You can also connect with Mr. Alves via remind**

Get [Outlook for iOS](#)

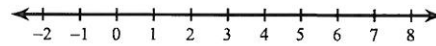
# One-Step Inequalities

Solve each inequality and graph its solution.

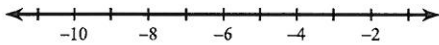
1)  $-12 > x - 7$



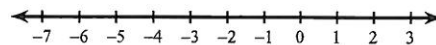
2)  $-1 + r \geq 4$



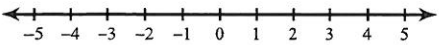
3)  $n - 6 \leq -14$



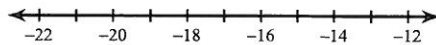
4)  $b - 7 < -12$



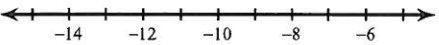
5)  $a - 17 > -16$



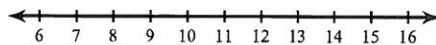
6)  $15 + x \leq 0$



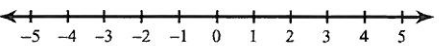
7)  $3 + v \leq -9$



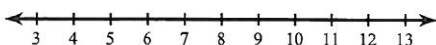
8)  $8 \geq n - 6$



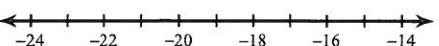
9)  $-3x > 3$



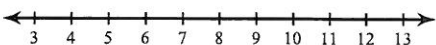
10)  $\frac{n}{3} > 3$



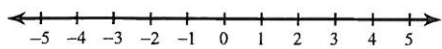
11)  $\frac{k}{4} < -4$



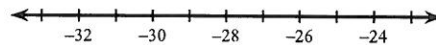
12)  $-9x \geq -90$



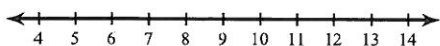
13)  $0 \geq 7n$



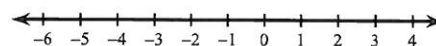
14)  $\frac{m}{5} \geq -5$



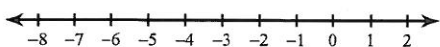
15)  $-13x < -156$



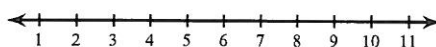
16)  $32 \geq -16p$



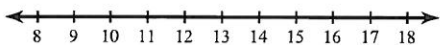
17)  $-8 > v - 3$



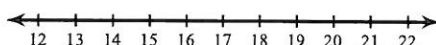
18)  $11 \leq 5 + x$



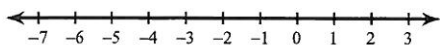
19)  $25 \geq n + 13$



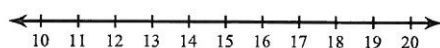
20)  $-168 > -12a$



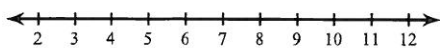
21)  $-3 \leq x - 4$



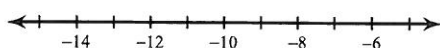
22)  $\frac{r}{3} > 6$



23)  $12n \geq 84$



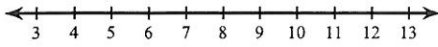
24)  $-22 > -10 + b$



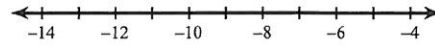
## Two-Step Inequalities

Solve each inequality and graph its solution.

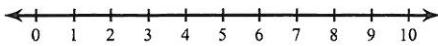
1)  $2x + 4 \geq 24$



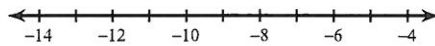
2)  $\frac{m}{3} - 3 \leq -6$



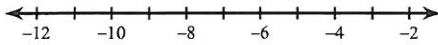
3)  $-3(p + 1) \leq -18$



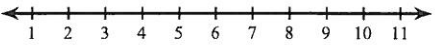
4)  $-4(-4 + x) > 56$



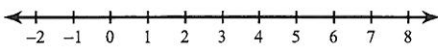
5)  $-b - 2 > 8$



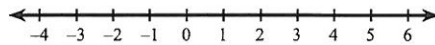
6)  $-4(3 + n) > -32$



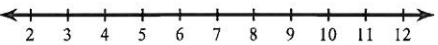
7)  $4 + \frac{n}{3} < 6$



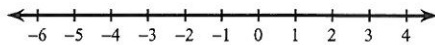
8)  $-3(r - 4) \geq 0$



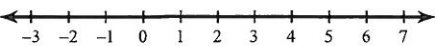
9)  $-7x + 7 \leq -56$



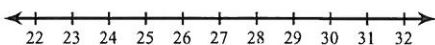
10)  $-3(p - 7) \geq 21$



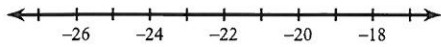
11)  $-11x - 4 > -15$



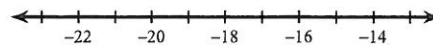
12)  $\frac{-9 + a}{15} > 1$



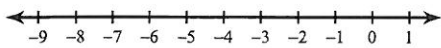
$$13) -1 \leq \frac{v-2}{21}$$



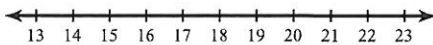
$$14) -132 > 12(n+9)$$



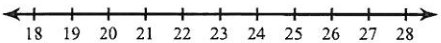
$$15) \frac{-11+n}{15} < -1$$



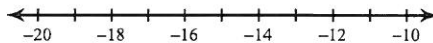
$$16) -90 \geq -5(k-3)$$



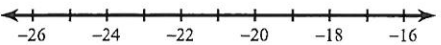
$$17) 4 < 1 + \frac{n}{7}$$



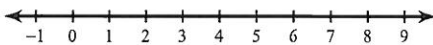
$$18) -1 > \frac{12+x}{4}$$



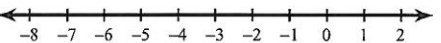
$$19) 7n - 1 > -169$$



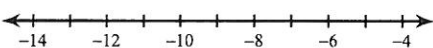
$$20) -4b - 5 > -25$$



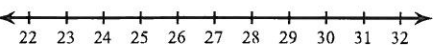
$$21) 84 \geq -7(v-9)$$



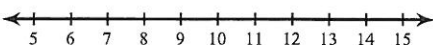
$$22) \frac{-8+r}{2} > -8$$



$$23) \frac{x}{-6} - 8 \leq -12$$



$$24) \frac{m-3}{2} \leq 5$$



## Writing Linear Equations

Write the slope-intercept form of the equation of each line.

1)  $3x - 2y = -16$

2)  $13x - 11y = -12$

3)  $9x - 7y = -7$

4)  $x - 3y = 6$

5)  $6x + 5y = -15$

6)  $4x - y = 1$

7)  $11x - 4y = 32$

8)  $11x - 8y = -48$

Write the standard form of the equation of the line through the given point with the given slope.

9) through:  $(1, 2)$ , slope = 7

10) through:  $(3, -1)$ , slope = -1

11) through:  $(-2, 5)$ , slope = -4

12) through:  $(3, 5)$ , slope =  $\frac{5}{3}$

13) through:  $(2, -4)$ , slope =  $-1$

14) through:  $(2, 5)$ , slope = undefined

15) through:  $(3, 1)$ , slope =  $\frac{1}{2}$

16) through:  $(-1, 2)$ , slope =  $2$

**Write the point-slope form of the equation of the line described.**

17) through:  $(4, 2)$ , parallel to  $y = -\frac{3}{4}x - 5$

18) through:  $(-3, -3)$ , parallel to  $y = \frac{7}{3}x + 3$

19) through:  $(-4, 0)$ , parallel to  $y = \frac{3}{4}x - 2$

20) through:  $(-1, 4)$ , parallel to  $y = -5x + 2$

21) through:  $(2, 0)$ , parallel to  $y = \frac{1}{3}x + 3$

22) through:  $(4, -4)$ , parallel to  $y = -x - 4$

23) through:  $(-2, 4)$ , parallel to  $y = -\frac{5}{2}x + 5$

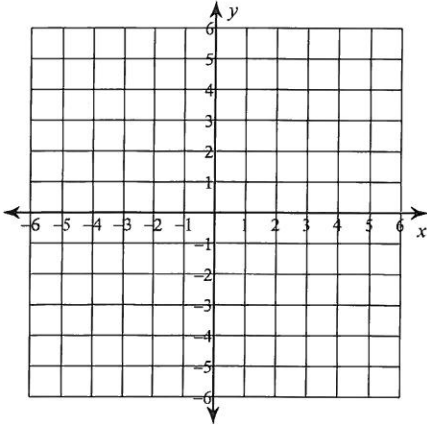
24) through:  $(-4, -1)$ , parallel to  $y = -\frac{1}{2}x - 1$



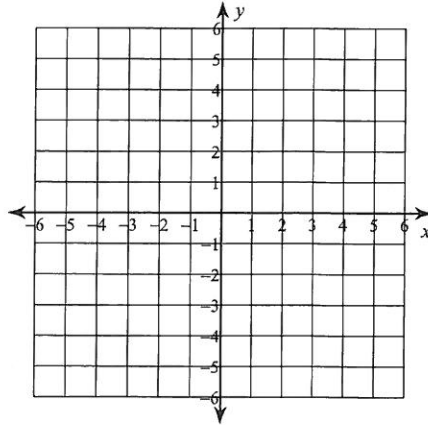
# Graphing Lines

Sketch the graph of each line.

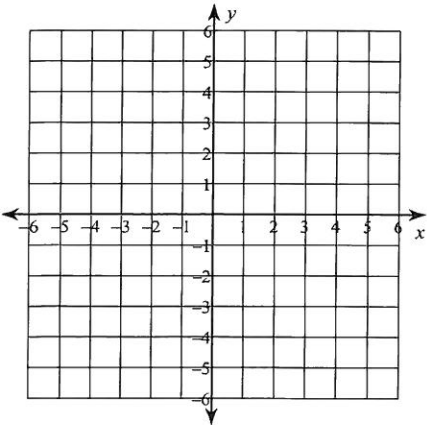
1)  $7x + y = 5$



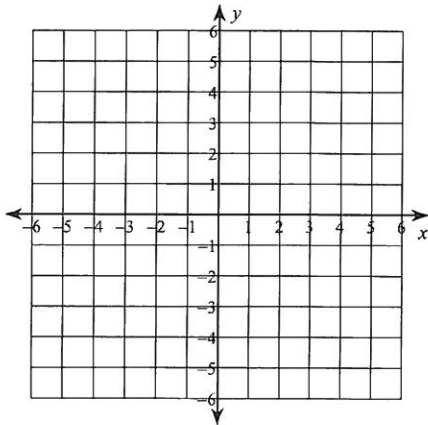
2)  $3x + 5y = -5$



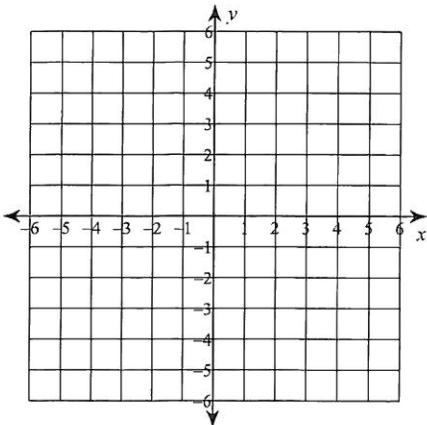
3)  $y = 4$



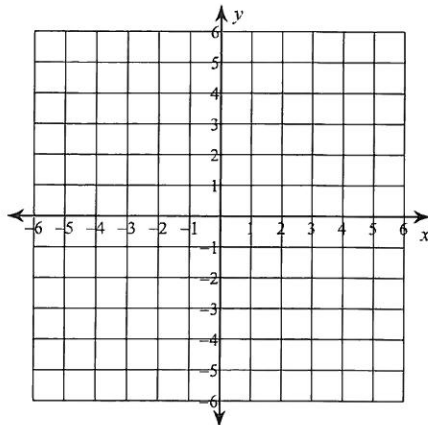
4)  $6x + 5y = 20$



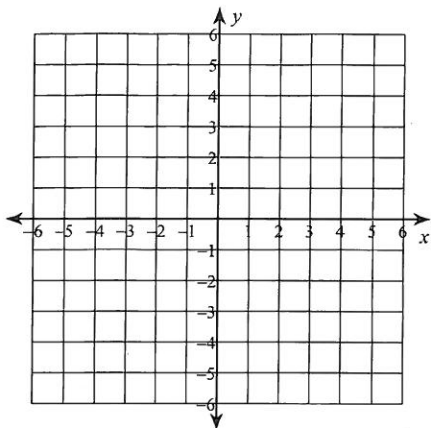
5)  $x = -3$



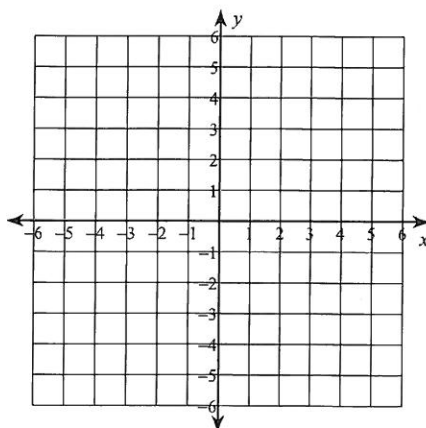
6)  $2x + y = 4$



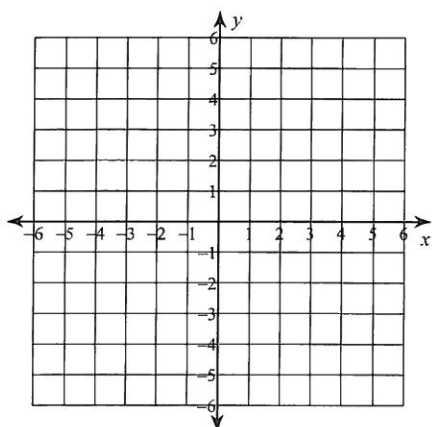
7)  $x + y = 3$



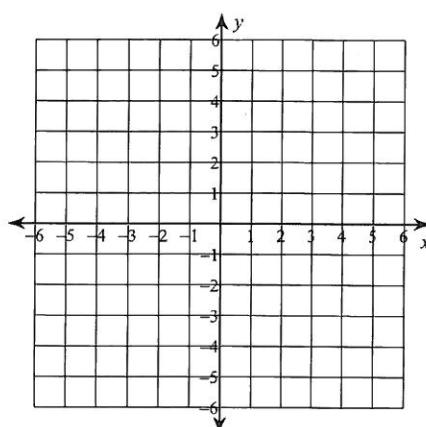
8)  $10x - 3y = 15$



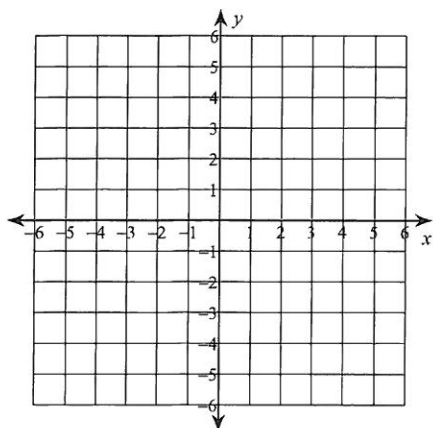
9)  $x - y = 3$



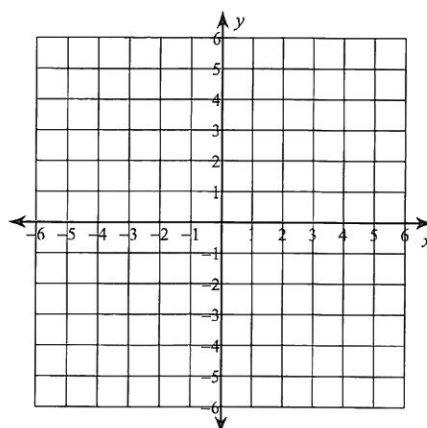
10)  $y = 0$



11)  $x + y = -3$



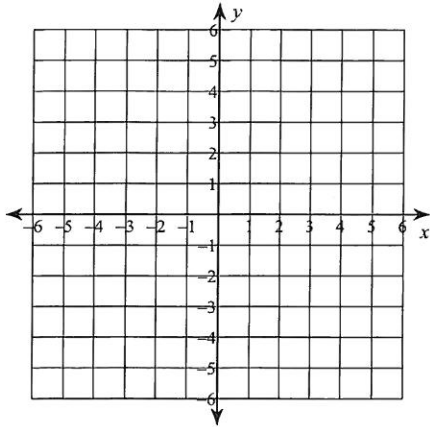
12)  $x + y = -1$



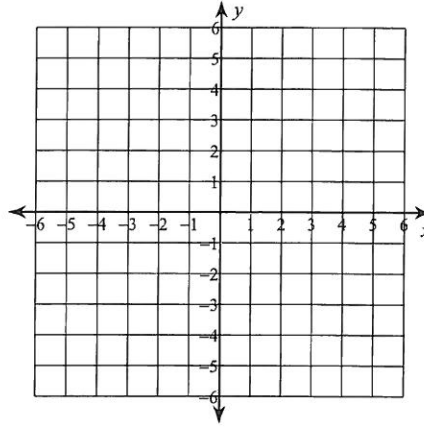
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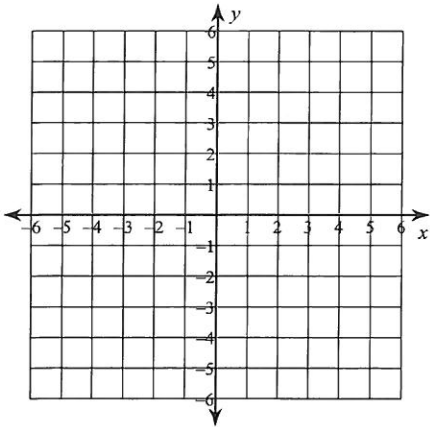
1)  $y = \frac{7}{2}x - 2$



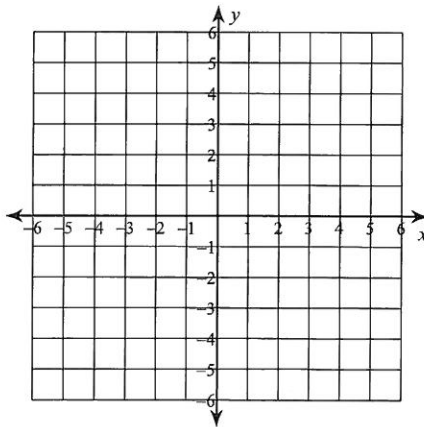
2)  $y = -6x + 3$



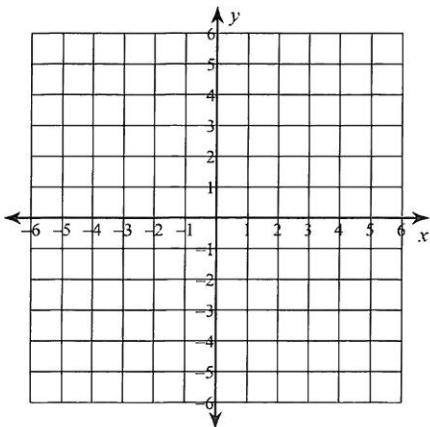
3)  $y = -5$



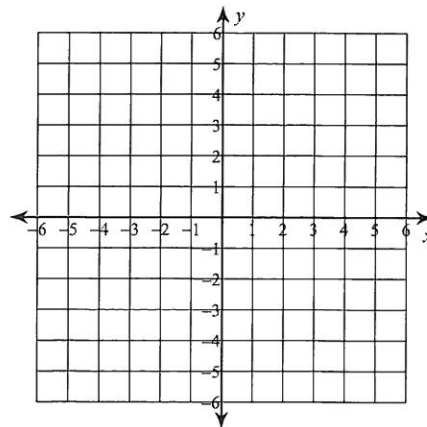
4)  $y = \frac{6}{5}x + 1$



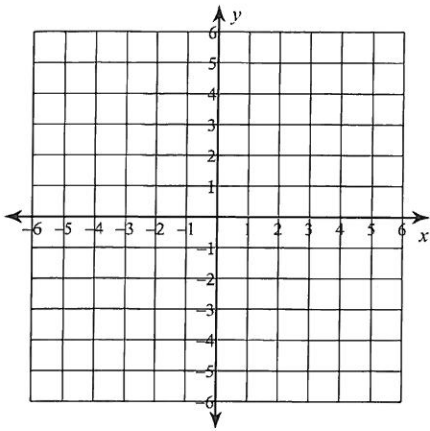
5)  $y = \frac{1}{4}x + 2$



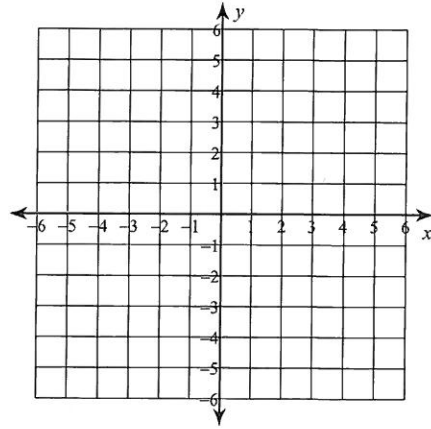
6)  $x = 5$



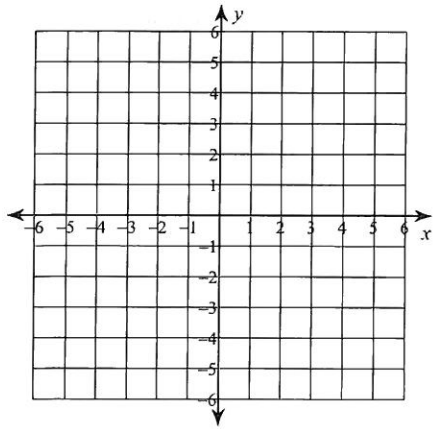
7)  $y = \frac{5}{3}x$



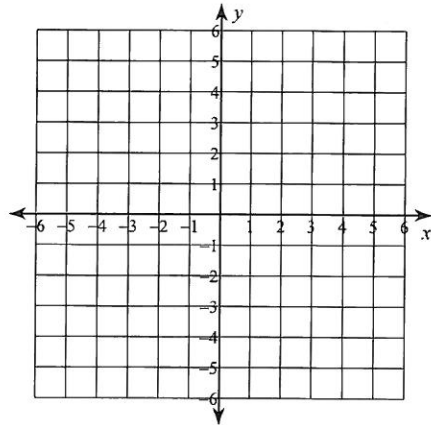
8)  $x = 0$



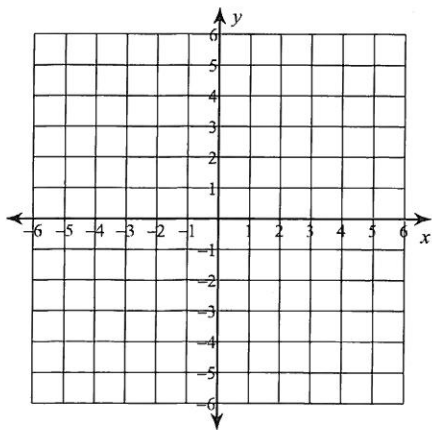
9)  $y = -\frac{1}{3}x + 3$



10)  $y = \frac{1}{5}x - 4$



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



12)  $y = 2x + 5$

