

New Bedford Public Schools
Division of Adult & Continuing Education

New Bedford High School Evening Extension

2019 – 2020 School Year
Trimester III

Learning Packet #4
for
Algebra I

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

Due date: May 12, 2020

Solving Systems of Equations by Substitution

Solve each system by substitution.

1) $y = 6x - 11$
 $-2x - 3y = -7$

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

3) $y = -3x + 5$
 $5x - 4y = -3$

4) $-3x - 3y = 3$
 $y = -5x - 17$

5) $y = -2$
 $4x - 3y = 18$

6) $y = 5x - 7$
 $-3x - 2y = -12$

7) $-4x + y = 6$
 $-5x - y = 21$

8) $-7x - 2y = -13$
 $x - 2y = 11$

9) $-5x + y = -2$
 $-3x + 6y = -12$

10) $-5x + y = -3$
 $3x - 8y = 24$

$$\begin{aligned} 11) \quad x + 3y &= 1 \\ -3x - 3y &= -15 \end{aligned}$$

$$\begin{aligned} 12) \quad -3x - 8y &= 20 \\ -5x + y &= 19 \end{aligned}$$

$$\begin{aligned} 13) \quad -3x + 3y &= 4 \\ -x + y &= 3 \end{aligned}$$

$$\begin{aligned} 14) \quad -3x + 3y &= 3 \\ -5x + y &= 13 \end{aligned}$$

$$\begin{aligned} 15) \quad 6x + 6y &= -6 \\ 5x + y &= -13 \end{aligned}$$

$$\begin{aligned} 16) \quad 2x + y &= 20 \\ 6x - 5y &= 12 \end{aligned}$$

$$\begin{aligned} 17) \quad -3x - 4y &= 2 \\ 3x + 3y &= -3 \end{aligned}$$

$$\begin{aligned} 18) \quad -2x + 6y &= 6 \\ -7x + 8y &= -5 \end{aligned}$$

$$\begin{aligned} 19) \quad -5x - 8y &= 17 \\ 2x - 7y &= -17 \end{aligned}$$

$$\begin{aligned} 20) \quad -2x - y &= -9 \\ 5x - 2y &= 18 \end{aligned}$$

Solving Systems of Equations by Elimination

Solve each system by elimination.

1)
$$\begin{aligned} -4x - 2y &= -12 \\ 4x + 8y &= -24 \end{aligned}$$

2)
$$\begin{aligned} 4x + 8y &= 20 \\ -4x + 2y &= -30 \end{aligned}$$

3)
$$\begin{aligned} x - y &= 11 \\ 2x + y &= 19 \end{aligned}$$

4)
$$\begin{aligned} -6x + 5y &= 1 \\ 6x + 4y &= -10 \end{aligned}$$

5)
$$\begin{aligned} -2x - 9y &= -25 \\ -4x - 9y &= -23 \end{aligned}$$

6)
$$\begin{aligned} 8x + y &= -16 \\ -3x + y &= -5 \end{aligned}$$

7)
$$\begin{aligned} -6x + 6y &= 6 \\ -6x + 3y &= -12 \end{aligned}$$

8)
$$\begin{aligned} 7x + 2y &= 24 \\ 8x + 2y &= 30 \end{aligned}$$

9)
$$\begin{aligned} 5x + y &= 9 \\ 10x - 7y &= -18 \end{aligned}$$

10)
$$\begin{aligned} -4x + 9y &= 9 \\ x - 3y &= -6 \end{aligned}$$

11)
$$\begin{aligned} -3x + 7y &= -16 \\ -9x + 5y &= 16 \end{aligned}$$

12)
$$\begin{aligned} -7x + y &= -19 \\ -2x + 3y &= -19 \end{aligned}$$

$$\begin{aligned} 13) \quad & 16x - 10y = 10 \\ & -8x - 6y = 6 \end{aligned}$$

$$\begin{aligned} 14) \quad & 8x + 14y = 4 \\ & -6x - 7y = -10 \end{aligned}$$

$$\begin{aligned} 15) \quad & -4x - 15y = -17 \\ & -x + 5y = -13 \end{aligned}$$

$$\begin{aligned} 16) \quad & -x - 7y = 14 \\ & -4x - 14y = 28 \end{aligned}$$

$$\begin{aligned} 17) \quad & -7x - 8y = 9 \\ & -4x + 9y = -22 \end{aligned}$$

$$\begin{aligned} 18) \quad & 5x + 4y = -30 \\ & 3x - 9y = -18 \end{aligned}$$

$$\begin{aligned} 19) \quad & -4x - 2y = 14 \\ & -10x + 7y = -25 \end{aligned}$$

$$\begin{aligned} 20) \quad & 3x - 2y = 2 \\ & 5x - 5y = 10 \end{aligned}$$

$$\begin{aligned} 21) \quad & 5x + 4y = -14 \\ & 3x + 6y = 6 \end{aligned}$$

$$\begin{aligned} 22) \quad & 2x + 8y = 6 \\ & -5x - 20y = -15 \end{aligned}$$

$$\begin{aligned} 23) \quad & -14 = -20y - 7x \\ & 10y + 4 = 2x \end{aligned}$$

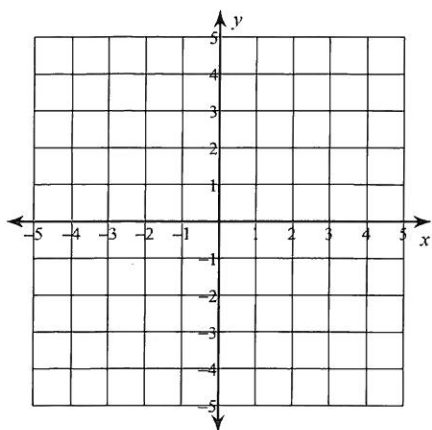
$$\begin{aligned} 24) \quad & 3 + 2x - y = 0 \\ & -3 - 7y = 10x \end{aligned}$$

Solving Systems of Equations by Graphing

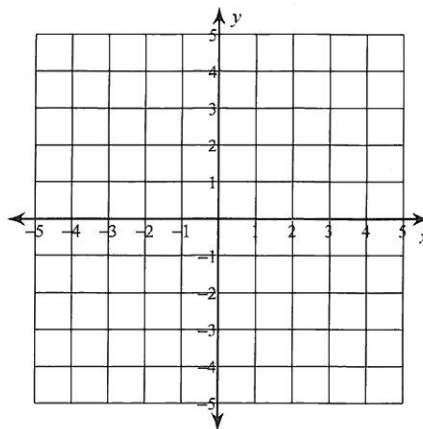
Solve each system by graphing.

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

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

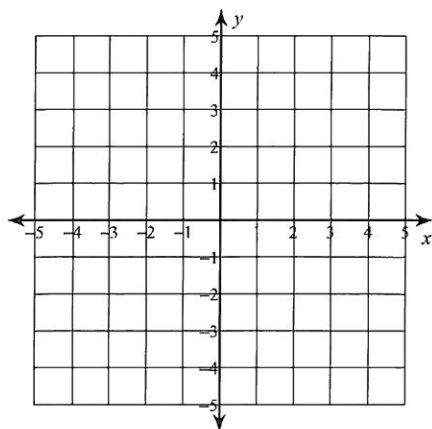


2) $y = 4x + 3$
 $y = -x - 2$

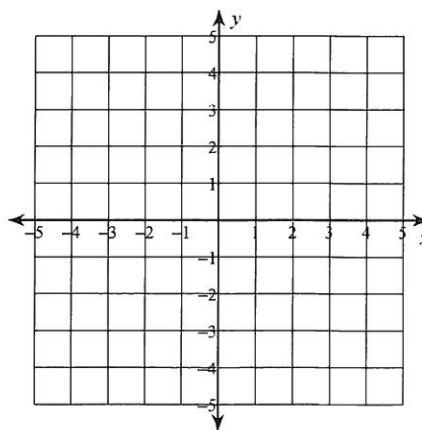


3) $y = -\frac{1}{2}x - 1$

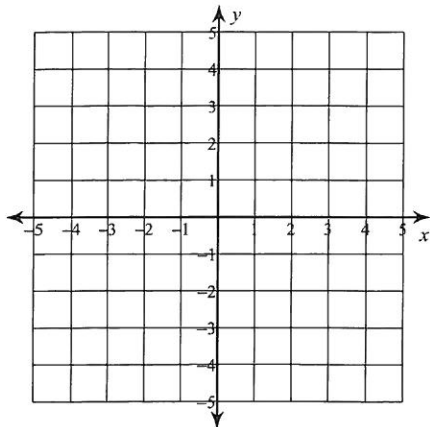
$y = \frac{1}{4}x - 4$



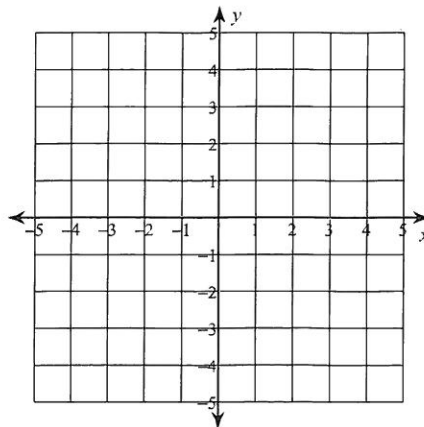
4) $y = -1$
 $y = -\frac{5}{2}x + 4$



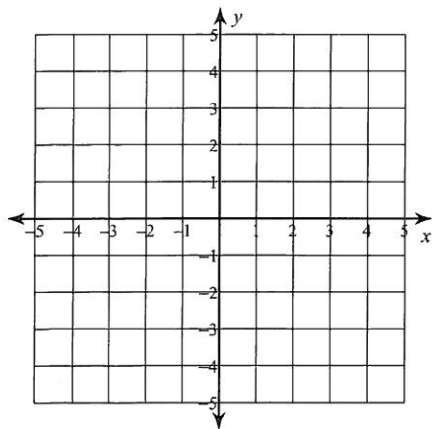
5) $y = 3x - 4$
 $y = -\frac{1}{2}x + 3$



6) $y = -2x + 2$
 $y = -2x - 2$



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



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

