

New Bedford Public Schools
Division of Adult & Continuing Education

New Bedford High School Evening Extension

2019 – 2020 School Year
Trimester III

Learning Packet
for
Algebra II

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

Due date: **April 7, 2020**

Algebra II Evening At-home Learning Packets

Solving Multi-Step Equations

Date _____ Period _____

Solve each equation.

1) $4n - 2n = 4$

2) $-12 = 2 + 5v + 2v$

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

4) $x + 3 - 3 = -6$

5) $-12 = 3 - 2k - 3k$

6) $-1 = -3r + 2r$

7) $6 = -3(x + 2)$

8) $-3(4r - 8) = -36$

9) $24 = 6(-x - 3)$

10) $75 = 3(-6n - 5)$

Evaluating Functions

Date _____ Period _____

Evaluate each function.

1) $h(t) = t + 2 + 3$; Find $h(6)$

2) $g(a) = 3 \cdot 3a - 2$; Find $g(1)$

3) $w(t) = -2t + 1$; Find $w(-7)$

4) $g(x) = 3x - 3$; Find $g(-6)$

5) $h(n) = -2n^2 + 4$; Find $h(4)$

6) $h(t) = -2 \cdot 5 - t - 1$; Find $h(-2)$

7) $f(x) = x^2 - 3x$; Find $f(-8)$

8) $p(a) = -4 \cdot 3a$; Find $p(-1)$

9) $p(t) = 4t - 5$; Find $p(t - 2)$

10) $g(a) = 4a$; Find $g(2a)$

11) $w(n) = 4n + 2$; Find $w(3n)$

12) $w(a) = a + 3$; Find $w(a + 4)$

Solving Systems of Equations by Elimination

Date _____ Period _____

Solve each system by elimination.

1) $-4x - 15y = -17$
 $-x + 5y = -13$

2) $-x - 7y = 14$
 $-4x - 14y = 28$

3) $-7x - 8y = 9$
 $-4x + 9y = -22$

4) $5x + 4y = -30$
 $3x - 9y = -18$

5) $-4x - 2y = 14$
 $-10x + 7y = -25$

6) $3x - 2y = 2$
 $5x - 5y = 10$

7) $5x + 4y = -14$
 $3x + 6y = 6$

8) $2x + 8y = 6$
 $-5x - 20y = -15$

Solving Systems of Equations by Substitution

Date _____ Period _____

Solve each system by substitution.

$$\begin{aligned} 1) \quad & y = 6x - 11 \\ & -2x - 3y = -7 \end{aligned}$$

$$\begin{aligned} 2) \quad & 2x - 3y = -1 \\ & y = x - 1 \end{aligned}$$

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

$$\begin{aligned} 4) \quad & -3x - 3y = 3 \\ & y = -5x - 17 \end{aligned}$$

$$\begin{aligned} 5) \quad & y = -2 \\ & 4x - 3y = 18 \end{aligned}$$

$$\begin{aligned} 6) \quad & y = 5x - 7 \\ & -3x - 2y = -12 \end{aligned}$$

$$\begin{aligned} 7) \quad & -4x + y = 6 \\ & -5x - y = 21 \end{aligned}$$

$$\begin{aligned} 8) \quad & -7x - 2y = -13 \\ & x - 2y = 11 \end{aligned}$$

$$\begin{aligned} 9) \quad & -5x + y = -2 \\ & -3x + 6y = -12 \end{aligned}$$

$$10) \begin{aligned} -5x + y &= -3 \\ 3x - 8y &= 24 \end{aligned}$$

Compound Inequalities

Date _____ Period _____

Solve each compound inequality and graph its solution.

1) $n + 1 \leq -3$ or $-4n < -8$

2) $k + 4 \geq 1$ or $k - 3 \leq -1$

3) $2 < 2x < 6$

4) $6 \leq x + 6 \leq 11$

5) $-3 < m - 5 < -1$

6) $p + 4 \leq 1$ or $p - 1 \geq 1$

7) $-33 \leq -7n - 12 < -26$

8) $9 + 2b < 7$ or $7 - 5b < -8$

9) $9 - 12r \geq -99$ and $-2r - 4 < -12$

10) $12 + 4n > 44$ or $10 - 12n > -38$

Graphing Linear Inequalities

Date _____ Period _____

Sketch the graph of each linear inequality.

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

2) $y \leq -1/3(x) + 1$

3) $x \geq -2$

4) $y < x - 2$

5) $y \geq x - 2$

6) $y < 6x + 1$

7) $5x - y \geq 5$

8) $x + 3y \geq 3$

Solving Absolute Value Equations

Date _____ Period _____

Solve each equation.

1) $|3x| = 9$

2) $|-3r| = 9$

3) $|b/5| = 1$

4) $|-6m| = 30$

5) $|n/3| = 2$

6) $|-4 + 5x| = 16$

7) $|-2r - 1| = 11$

8) $|1 - 5a| = 29$

9) $|-2n + 6| = 6$

10) $|v + 8| - 5 = 2$

For guided examples and more practice problems, follow link below (press control and click).

<https://documentcloud.adobe.com/link/track?uri=urn%3Aaaid%3Aasc%3AUS%3A1bcc4e26-e167-4ae5-be74-bde5d32f5e0b>