Graphing Self-Test SOL'S covered: A.6, A.7abef Name_____

1) Define the following terms. (On the test it will be matching.)

A. coordinate planeB. relationC. domainD. graphE. inverse of a relationF. linear equationG. mappingH. ordered pairI. originJ. quadrantK. rangeL. x-axisM. y-axisN. slope

2) Label the quadrants in the coordinate plane AND name the quadrant for each ordered pair.

a) (-1, 2)	
b) (-3, -1)	
c) $(0, 4)$	
d) (1, 3)	
e) (-1, 0)	

- 3) For the following relation {(1,0), (2, -1), (-1, 0), (2, 3)}
 - a) Draw a mapping.
 - b) State the domain.
 - c) State the range.
 - d) State the inverse of the relation.
- 4) Solve the following equations for y. a) 2x + y = 4 b) x - 3y = 6 c) 2x + 2y = 6
- 5) Complete a table and graph using the following domain: $\{-2, -1, 0, 1, 2\}$. a) y = -x + 2 b) x + 5y = 4 c) 2x - 3y = 6

6) Determine whether each relation <u>and</u> inverse of the relation is a function.

a)
$$\{(3, 8), (9, 3), (-3, 8), (5, 3)\}$$
 b)

$$1 \begin{pmatrix} 0 \\ 3 \\ 6 \end{pmatrix} = 2$$

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7) If $g(x) = x^2 - x + 1$, find each value. a) g(2) b) g(-1) c) g(1/2)

- 8) Determine whether each equation is a linear equation. If it is linear, write it in Standard Form (Ax + By = C).
 - a) 3x + y = 2xb) xy = 4c) $\frac{2}{3}x + \frac{4}{5}y = 3$