Quiz #5: Linear Equations

A. True or False

Write True if the expression is true or False if it is false. One point each.

1. The point $(-2, 3)$ is located in QII.
2. The point $(0, 5)$ is located in the x-axis.
3. The point $(-7, -5)$ is located in QIV.
4. The point $(3, -5)$ is located in QIV.
5. The point $(-3, 0)$ is located in the x-axis.

B. Linear Equation or Not

Write Yes if the equation is a linear equation in two variables or No if it is not. One point each.

6. $3x = 1 - y$
7. $xy = 3$
8. $\frac{1}{2}x = 2y$
9. $x^2 - y = 3$
10. $y = \frac{3}{x}$

C. Solving Linear Equations

Given each equation, determine the value of y if $x = -2$ and find the coordinates that satisfy the equation. Choose the answer from the box. Answers may be repeated. Write the letter only. One point each.

a. $(-2, -1)$	d. $(-2, 1)$
b. $(-2, -8)$	
c. $(-2, -10)$	e. $(-2, 3)$

11. $2x = 4 + y$
12. $y = 5x$
13. $3x - 2 = y$
14. $-\frac{1}{2}x = y$
15. $-y = \frac{x}{2}$
16. $-2x + y = -4$
17. $y = -x + 1$
18. $x + y = 1$
19. $\frac{x}{y} = 2$
20. $y = x + 1$

D. Finding the Slope of a Line

Find the slope of the line given each equation. Choose the answer from the box. Write the letter only. One point each.

a. 1	d. -2
b. 2	
c. 3	e. $\frac{1}{2}$

21. $y = -2x - 1$
22. $y = 3x$
23. $y = \frac{1}{2}x + 3$
24. $-2x + y = 3$
25. $x - y = 5$