**Core Algebra 2** NAME_____

**Quiz 1.3**

**Write the letter for the best answer.**

**Find the slope.** $\left(\frac{y_2 - y_1}{x_2 - x_1}\right)$

1. (4,2)(1, 11)

**A**. -3 **B**. 3
**C**. $-\frac{1}{3}$ **D**. $\frac{1}{3}$

2. (5,-2)(7,8)

**A**. 5 **B**. -5
**C**. $\frac{1}{5}$ **D**. $-\frac{1}{5}$

3. (6,-5)(3,2)

**A**. $-\frac{3}{7}$ **B**. $\frac{3}{7}$
**C**. $-\frac{7}{3}$ **D**. $\frac{7}{3}$

**Find the slope (*m*) and the *y*-intercept (b).** $y = mx + b$

4. $y = 5x - 1$

**A**. $m = 5, b = 1$
**B**. $m = -5, b = -1$
**C**. $m = -5, b = 1$
**D**. $m = 5, b = -1$

5. $4y = 12x + 20$

**A**. $m = 3, b = -5$
**B**. $m = -3, b = 5$
**C**. $m = 3, b = 5$
**D**. $m = -3, b = -5$

6. $3y - 4x = 5$

**A**. $m = \frac{4}{3}, b = \frac{5}{3}$
**B**. $m = -\frac{4}{3}, b = -\frac{5}{3}$
**C**. $m = \frac{3}{4}, b = -\frac{3}{5}$
**D**. $m = -\frac{3}{4}, b = \frac{3}{5}$

**Write the linear equation in slope-intercept form for each given set of information.** $y - y_1 = m(x - x_1)$

7. (1, 3) (4, 9)

**A**. $y = 2x - 1$ **B**. $y = \frac{1}{2}x + 6$
**C**. $y = \frac{1}{2}x - 6$ **D**. $y = 2x + 1$

8. (4, 1) (7, -8)

**A**. $y = -3x - 13$ **B**. $y = -\frac{1}{3}x - 7$
**C**. $y = -3x + 13$ **D**. $y = -\frac{1}{3}x + 7$

9. (2, -3) $m = 5$

**A**. $y = 5x - 10$ **B**. $y = 5x - 13$
**C**. $y = 5x - 7$ **D**. $y = 5x + 13$

10. (2, -1) *y-intercept* = 3

**A**. $y = 4x + 6$ **B**. $y = -2x + 3$
**C**. $y = -2x - 3$ **D**. $y = 4x - 6$

11. (5, -6) $m = 0$

**A**. $y = -6$ **B**. $y = 5$
**C**. $x = -6$ **D**. $x = 5$

**Solve for $x$ to each system of equations by using the SUBSTITUTION method.**

12. $3x - 2y = 2$
$2x + y = 13$

**A**. -4 **B**. -5
**C**. 4 **D**. 5

13. $4x + 3y = 5$
$x + 2y = 5$

**A**. -3 **B**. 1
**C**. -1 **D**. 3

**Solve for $y$ to each system of equations by using the ELIMINATION method.**

14. $3x + 2y = 6$
$2x - y = -10$

**A**. 6 **B**. -6
**C**. 2 **D**. -2

15. $3x + 4y = -7$
$-4x - 2y = -4$

**A**. 3 **B**. 4
**C**. -3 **D**. -4