

Algebra 1

Practice Quiz 4.1-4.4

NAME KEY

Write an equation of a line in SLOPE-INTERCEPT form with the given slope and y-intercept. (2 Points)

1. slope: 3, y-intercept: -6

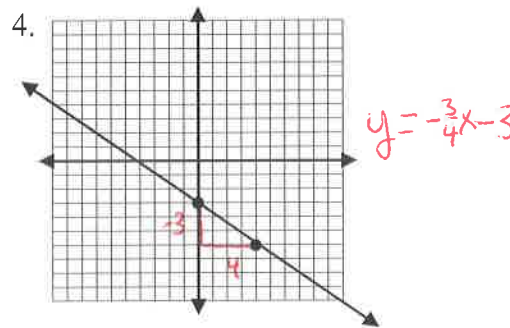
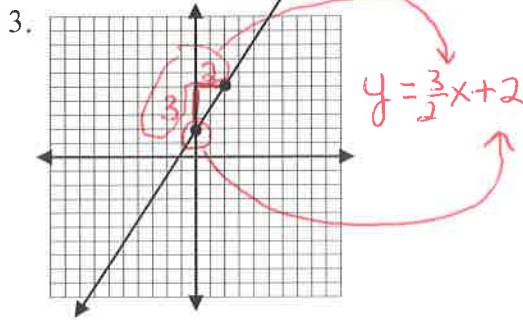
$$y = 3x - 6$$

2. slope: $\frac{3}{2}$, y-intercept: 5

$$y = \frac{3}{2}x + 5$$

1. _____

Write an equation in SLOPE-INTERCEPT form for each graph. (2 Points)



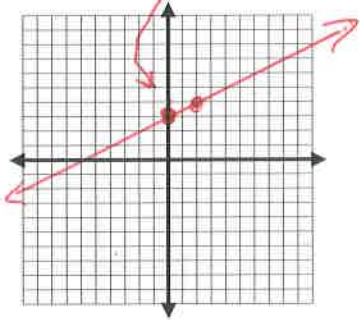
2. _____

3. _____

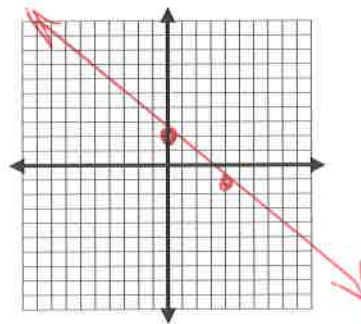
4. _____

Graph each equation. (3 Points)

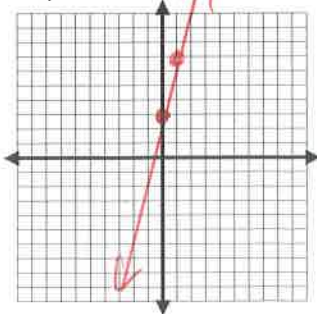
5. $y = \frac{1}{2}x + 3$



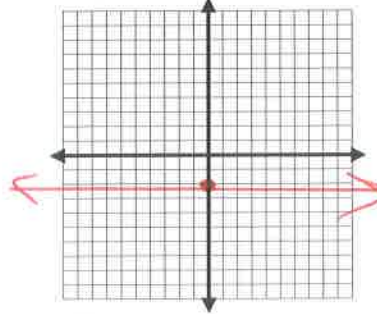
6. $y = -\frac{3}{4}x + 2$



7. $y = 4x + 3$



8. $y = -2$



Points(20) _____

Write an equation in SLOPE-INTERCEPT form for each. (2 Points)

9. passes thru (-3, 1), $m = 4$

$$y - 1 = 4(x + 3)$$

$$y - 1 = 4x + 12$$

$$+1 \quad +1$$

$$y = 4x + 13$$

11. $y + 4 = x + 7$

$$-4 \quad -4$$

$$y = x + 3$$

10. passes thru (2, 5), $m = -2$

$$y - 5 = -2(x - 2)$$

$$y - 5 = -2x + 4$$

$$+5 \quad +5$$

$$y = -2x + 9$$

12. $y - 5 = 2(x - 1)$

$$y - 5 = 2x - 2$$

$$+5 \quad +5$$

$$y = 2x + 3$$

9. _____

10. _____

11. _____

12. _____

(3 Points)

13. passes thru (-1, 6),

parallel to $y = 2x - 1$

$$y - 6 = 2(x + 1)$$

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

$$+6 \quad +6$$

$$y = 2x + 8$$

14. passes thru (4, -3),

perpendicular to $y = \frac{1}{5}x - 3$

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

$$y + 3 = -5x + 20$$

$$-3 \quad -3$$

$$y = -5x + 17$$

13. _____

14. _____

15. _____

16. _____

Write an equation in STANDARD form for each. (2 Points)

15. $y + 3 = -4(x + 1)$

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

$$+3 \quad +3$$

$$4x + y = -7$$

16. $y - 2 = \frac{1}{3}(x - 9)$

$$\left[y - 2 = \frac{1}{3}x - 3 \right] 3$$

$$3y - 6 = x - 9$$

$$+6 \quad +6$$

$$-x + 3y = -3$$

$$x - 3y = 3$$

17. _____

18. _____

Points(22) _____

Determine whether the graphs of the following equations are parallel or perpendicular. (2 Points)

17. $y = -3x + 2$; $4y = 12x - 8$

$$m = -3$$

$$y = 3x - 2$$

$$m = 3$$

Neither

18. $\frac{3y}{3} = \frac{4x}{3} + \frac{6}{3}$; $8y + 6x = -16$

$$y = \frac{4}{3}x + 2$$

$$m = \frac{4}{3}$$

$$\frac{8y}{8} = \frac{-6x}{8} - \frac{16}{8}$$

$$y = -\frac{3}{4}x - 2$$

$$m = -\frac{3}{4}$$

Perpendicular