

Algebra 1 (Lesson 6.1)

1. Slope = 200
y-int: (0, 500)

5. $y = mx + b$
 $5 = 3(1) + b$
 $a = b$

$$y = 3x + 2$$

9. $y = mx + b$
 $-5 = -\frac{2}{3}(-6) + b$
 $-5 = 4 + b$

$$b = -9$$

$$y = -\frac{2}{3}x - 9$$

13. Slope = $\frac{6-2}{6-(-2)} = \frac{4}{8} = \frac{1}{2}$

$$y = mx + b$$

$$2 = \frac{1}{2}(-2) + b$$

$$2 = -1 + b$$

$$b = 3$$

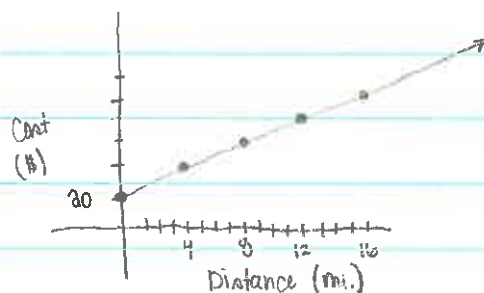
$$y = \frac{1}{2}x + 3$$

17. Slope = $\frac{2}{3}$

$$y\text{-int: } (0, -4)$$



3.



7. $y = mx + b$
 $2 = \frac{1}{4}(4) + b$
 $2 = 1 + b$
 $b = 1$

$$y = \frac{1}{4}x + 1$$

11. Slope = $\frac{7-1}{5-3} = \frac{6}{2} = 3$

$$y = mx + b$$

$$1 = 3(3) + b$$

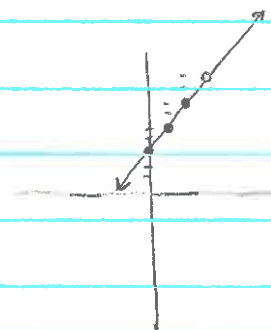
$$1 = 9 + b$$

$$b = -8$$

$$y = 3x - 8$$

15. Slope = 2

$$y\text{-int: } (0, 3)$$



$$19. -4x + 2y = 10$$

$$2y = 4x + 10$$

$$y = 2x + 5$$

Slope: 2

$$y\text{-int: } (0, 5)$$



$$21. -5x - 2y = 8$$

$$-2y = 5x + 8$$

$$y = -\frac{5}{2}x - 4$$

Slope: $-\frac{5}{2}$

$$y\text{-int: } (0, -4)$$



$$23. y = 30 + 25x$$

$$y = 30 + 25(6)$$

$$y = 180 \text{ dollars}$$

Yes, there will be \$20

left on the card.

$$25. \text{ Jake: } y = -24x + 168$$

$$\frac{5}{4}(24) = 30$$

$$y = -24(5) + 168 = 48 \text{ pages}$$

$$\text{Julio: } y = -30x + 180$$

$$y = -30(5) + 180 = 30 \text{ pages}$$

Jake will have 18 more pages to read.