$\qquad$

## UNIT 5 CORRECTIVE ASSIGNMENT

1. Given the table. Write the equation.

| $x$ | $y$ |
| :---: | :---: |
| 0 | 6 |
| 1 | 9 |
| 2 | 12 |
| 3 | 15 |

$\qquad$
$y=$ $\qquad$

Rate of Change = $\qquad$
2. Given the graph. Write the equation. Fill in the table.

$y=$ $\qquad$
$y$-intercept $=$ $\qquad$
Slope $=$ $\qquad$

| $x$ | $y$ |
| :---: | :---: |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |
| 20 |  |

## Function Notation

3. Use $f(x)=8-5 x$ to find...
a. $f(3)=$
b. $f(-8)=$
4. Use the graph of $g(x)$ to fill in table

| $x$ | $g(x)$ |
| :---: | :---: |
| -2 |  |
| 3 |  |
|  | 4 |

c. Find $x$ when $f(x)=28$

## Find the rate of change.

5. Tony Hawk did the first 900 in a half pipe. In his career he has done this 8 times. He lands the trick 3 times for every 16 attempts.
6. A maple tree has about 750 liters of sap in it. Aunt Jemima taps the tree. The tree loses 9 liters every day.

State the slope of the line.
7. $y=\frac{5}{9} x-5$
8. $y=8-6 x$

## Find the slope of the line.



## Graph the following.

15. $y=\frac{3}{4} x-1$

16. $x=-5$


| 17. $y=-\frac{5}{2} x+5$ |  | 18. $y=\frac{1}{6} x$ |  |
| :---: | :---: | :---: | :---: |
| 19. $y=3 x+5$ |  | 20. $y=-6 x$ |  |
| 21. $y=-4-x$ |  | 22. $y=3$ |  |
| 23. $2 y=6 x-12$ |  | 24. $3 x-4 y=8$ |  |

## Application: Mouseketeers

Brittney, Christina, and Justin decide to do a special 20 hour reunion show for Disney. Fill in the missing blanks for each of the three artists. (1 pt each)

## Brittney Spears

Brittney had 8 red bulls by the time show started. She drinks 1 red bull every 4 hours.

1. What is Brittney's initial value (start)?
2. What is Brittney's slope?
3. Write an equation to represent this.
4. Graph Brittney's equation. Label the axis.

5. How many red bulls will Brittney drink after 12 hours?

## Christina Aguilera

Christina's consumption is given by the table.

| $\boldsymbol{x}$ | $\boldsymbol{y}$ |
| :---: | :---: |
| Hours | Red <br> bulls |
| 0 | 2 |
| 3 | 5 |
| 6 | 8 |
| 9 | 11 |

6. What is Christina's rate of change?
7. What does her rate of change mean?
(AKA use rate of change in a sentence with labels.)
8. What is the $y$-intercept?
9. Write an equation to represent this.
10. Graph Christina’s equation on the same graph as Brittney in \#2.
11. At what time will Christina have drunk 16 red bulls?

## Justin Timberlake

12. Use the graph of Justin to fill in the table.
13. What is Justin's $y$-intercept?
14. What does Justin's $y$-intercept mean?
15. What is Justin's slope?

| $x$ | $y$ |
| :---: | :---: |
| 0 |  |
| 4 |  |
| 12 |  |
|  | 9 |

16. Write an equation to represent Justin.
17. Does the point $(-20,18)$ fall on the Justin's line?
(AKA is the point a solution to Justin's equation? SHOW WORK!)


Time
(hours)

## UNIT 5 Corrective Assignment Answers

1. Initial Value $=6$, Rate of Change $=3, y=3 x+6$
2. $y=2-1 x$ or $y=-x+2$, y-intercept $=2$, slope $=-1$, table

| $\boldsymbol{x}$ | $\boldsymbol{y}$ |
| :---: | :---: |
| -2 | 4 |
| -1 | 3 |
| 0 | 2 |
| 1 | 1 |
| 2 | 0 |
| 3 | -1 |
| 20 | -18 |


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


## APPLICATION!



