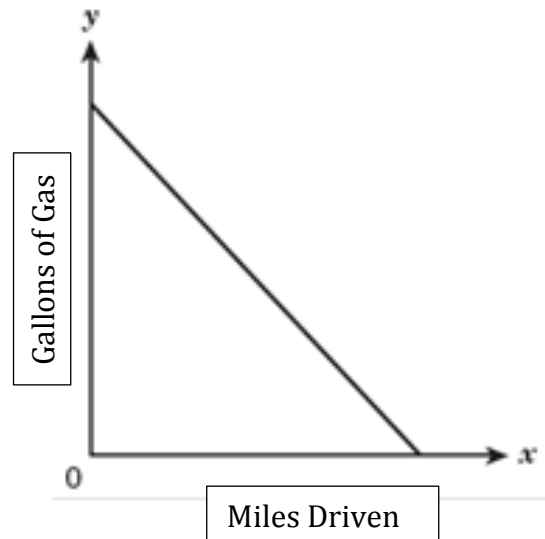


Meaning of Slope, X-intercept, and Y-intercept

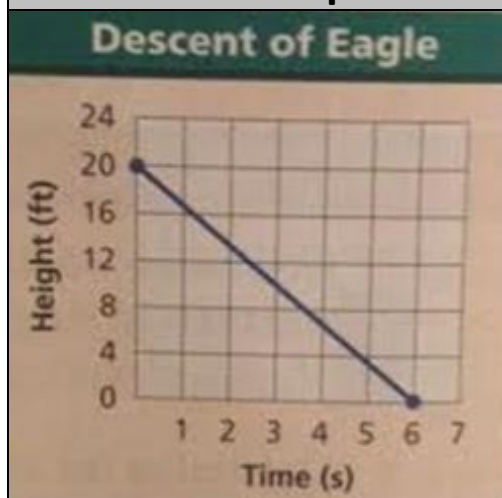
OBJECTIVE: SWBAT: _____

Term	Definition/Examples
Slope	
Y-Intercept	
X- Intercept/Zeroes	



Notes:

Slope-intercept Form: $y = mx + b$ or $y = b + mx$



1. $m =$

2. $b =$

3. eqn:

Slope: the rate of change.

Key words: per, each, every

4. The eagle descends _____ per _____.

Y-intercept (The beginning)

5. The eagle started to land at _____.

X-intercept: the ending (usually)

6. The eagle _____ after _____.

From a table

A weightlifter is adding weights of equal weight to a bar. The table below shows the total amount he will lift, including the bar, depending on the number of plates he uses.

# of plates	Total weight
2	100
4	150
5	175
6	200

7. $M =$

8. $B =$

9. Eqn:

Interpret the situation:

10. The bar (by itself) weighs _____

11. What is the meaning of the slope?

Independent Practice

The table shows how much money Amy has remaining on a gift card, b , after purchasing n coffees. Use the table for questions.

n	b
0	\$25
2	\$20
6	\$10
10	0

Let $n(x)$ be _____

Let $b(y)$ be _____

12. What is the equation for this situation?

13. What is the meaning of the y-intercept?
The gift card _____

14. What is the meaning of the x-intercept?
After _____ the gift card will be _____.

15. What is the meaning of the slope?
The _____ increases/decreases by _____ per _____.

16. Find the slope, x-intercept and y-intercepts of the equation

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

M: _____

B: _____

X-Int./Zero: _____

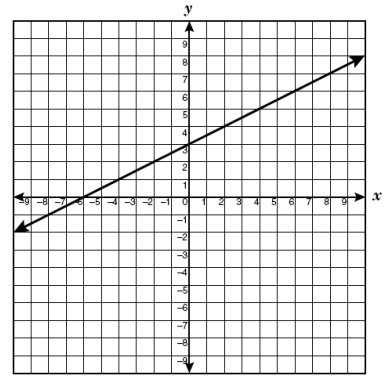
17. Find the slope and y-intercept of the equation $2x - 4y = 16$.

M: _____

B: _____

X-Int./Zero: _____

18. What is the equation of the line below?



20. Slope: _____

21. Y- Intercept: _____

22. X-Intercept: _____

The graph to the right shows the value of a computer over time.

- Write an equation to represent the value of the computer.
- What is the initial value of the computer?
- How much value does the computer lose each month?
- How many months will it take to have a value of \$0?
- What do we call this point?

