NTI DAY #2

(weather-closed school day)

PACKET

TWO

(Math)

8th grade Maroon- R. Persinger

General Directions:

Due to weather, Harrison County Schools are closed. In an effort to utilize this day on the school calendar, your child is assigned and should work on this "packet" of school work today. It will count as a grade for this subject. The work attached is specific to the subject listed above. Please contact your child's teacher of this subject at 234-7110 in the event you/your student have questions on this packet. Staff and teachers reported to HCMS today and are available should you have questions.

Name _____ Period _____

SLOPE INTERCEPT REVIEW $y = mx + b$ b is the y intercept while m is the slope

1. Which letter represents the slope ? A. x B. m C. y D. b

2. Which letter represents the y-intercept? A. x B. m C. y D. b

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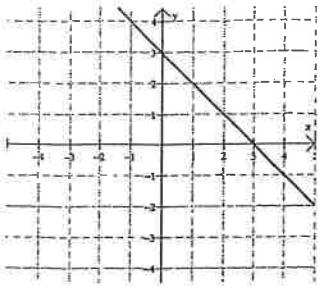
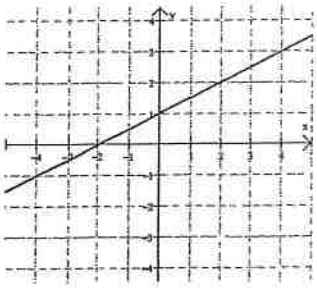
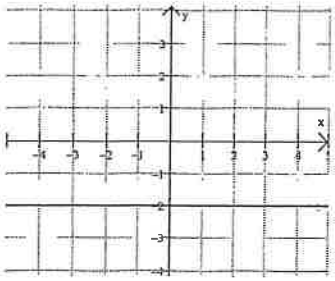
Line A



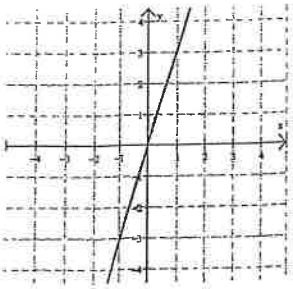
Line B



Line C



Line D



Use graphs of Lines A-D to answer question 3-10. **YOU MAY USE AN ANSWER MORE THAN ONCE**

Place the letter answer at the end of each question.

A) line a	*B) line b*	*C) line c*	*D) line d*	*E) none*

3. Which line has a negative slope?

4. Which line has a slope of zero?

5. Which line has a y-intercept at (0, 2)?

6. Which line has a slope of ½?

7. Which line is the graph of the equation $y = 3x$?

8. Which line is the graph of the equation $y = -x + 3$?

9. Which line has the greatest rate of change (steepest slope) ?

10 Which line is undefined?

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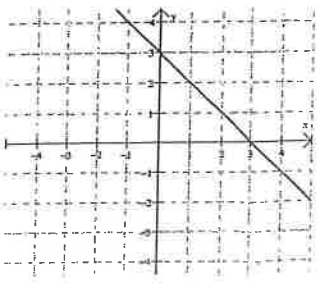
11. Which has the greater rate of change (steepest slope) ?

A 

B $y = 2x + 1$

C (4, 6) (5, 2)

12. The table below represents a linear function. Use the table below to find the slope.

x	0	2	4
y	5	6	7

A. 0 B. 2 C. $\frac{1}{2}$ D. –2

13. Find the slope of a line that contains the two points.

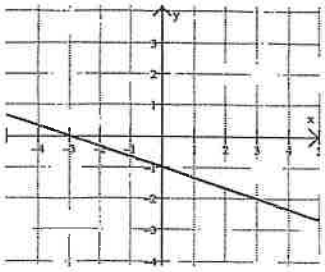
(0, 1) and (1, 3)

A. -2 B. 2 C. 1 D. 1/2

14. Which equation below would represent an undefined line when you graph it?

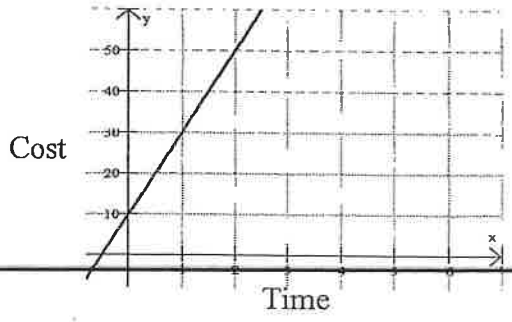
A. $y = x$ B. $y = 1$ C. $y = 2$ D. $x = 2$

15. What is the slope of the line below?



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

16 The graph for a technician that charges a $10 flat fee plus an hourly rate is shown below. What is the hourly rate charged?



A. $12 per hour B. $10 per hour C. $2 per hour D. $20 per hour

17. The equation of a line is given below. Based on the equation, what is the **slope** of the line?

$$\boxed{y = 3x + 1}$$

A. 3 B. –3 C. 1 D. x

18. Recka RollerRink rents skates for 2 dollars and 3 dollars an hour to skate. Which equation represents the story.??

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

19, Using the equation in question 18, if you skated for 4 hours how much did you pay?

A. $14 B. $ 12 C. $ 10 D. $ 8

20 Using the equation in question 18, how many hours would you skate if you had 16 dollars in your pocket.?

A. 4.6 hours B. 4 hours C. 5 hours D. unlimited hours

Notes to help with assignment

Central Tendency

Range- difference of the greatest and the least number

Mode- number or numbers that occur the most

Median- the middle number. (after you put them in order)

Mean- the avg number. (add all the numbers and divide by how many there are.)

EXAMPLE

4, 7, 11, 11, 12, 13, 17, 17, 19, 20

Range - 20 – 4 = 16

Mode- 11 and 17

Median- 12 + 13 = divide by two = 12.5

Mean- 131 / 10 = 13.1

Weather Statistics

You will need to find the weather forecast for the next seven days from either a weather app, television, newspaper, or online. Record the daily high and low temperatures.

Date:	High Temp	Low Temp

1) Calculate the average high temperature for the next seven days and show your work below.

2) Calculate the average low temperature for the next seven days and show your work below.

3) Find the median high temperature for the next seven days and show your work below.

4) Find the median low temperature for the next seven days and show your work below.

5) Calculate the range for the high temperatures over the next seven days and show your work.

6) Calculate the range for the low temperatures over the next seven days and show your work.

Pizza Math

Leono's: (859) 234-2517
Snappy's: (859)235-7627
Papa John's: (859)235-9900

1) Call Leono's, Snappy's, and Papa John's to find out the cost of a large cheese pizza and record the cost here:

Leono's: _____

Snappy's: _____

Papa John's: _____

2) Ask each location how much an additional topping cost and record the information here:

Leono's: _____

Snappy's: _____

Papa John's: _____

3) Write an equation to represent the total cost *c* for ordering a large pizza with any number of toppings *n*.

Leono's: _____

Snappy's: _____

Papa John's: _____

$y = mx + b$

$y = nx + c$

m - slope
- Extra topping cost

b - y intercept
- ~~Cost of cheese~~ pizza

Ex:

$y = 0.5x + 11$

Pizza - $11

Topping At $0.50 per

4) Complete the tables below to show the total cost for ordering a large pizza with varying numbers of toppings from each location.

Leonos

# toppings	cost $
0	
1	
5	
10	

Snappy's

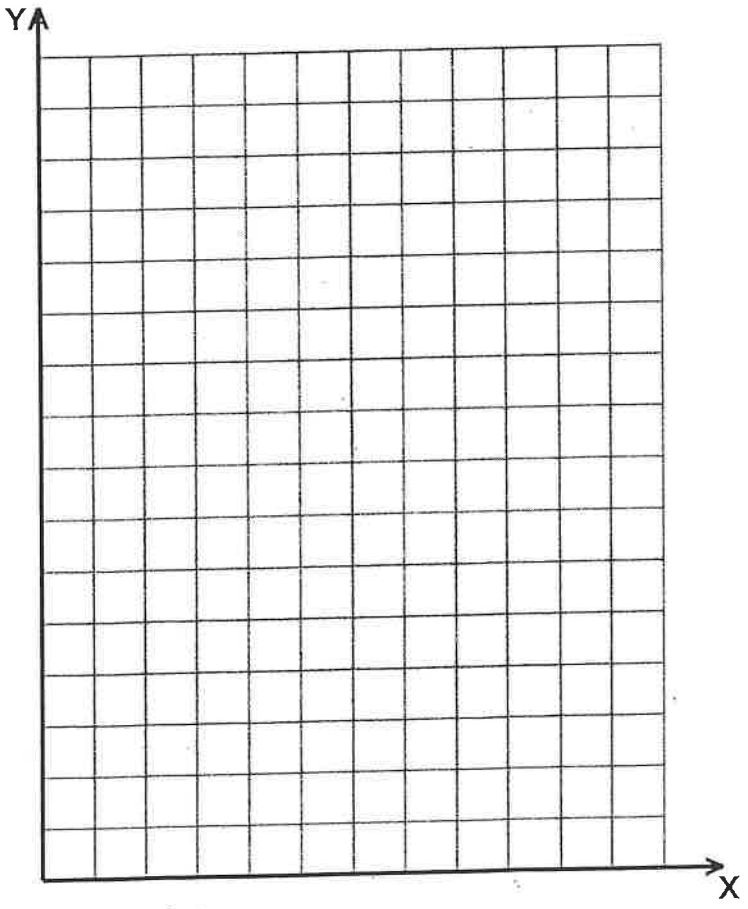
# toppings	cost $
0	
1	
5	
10	

Papa John's

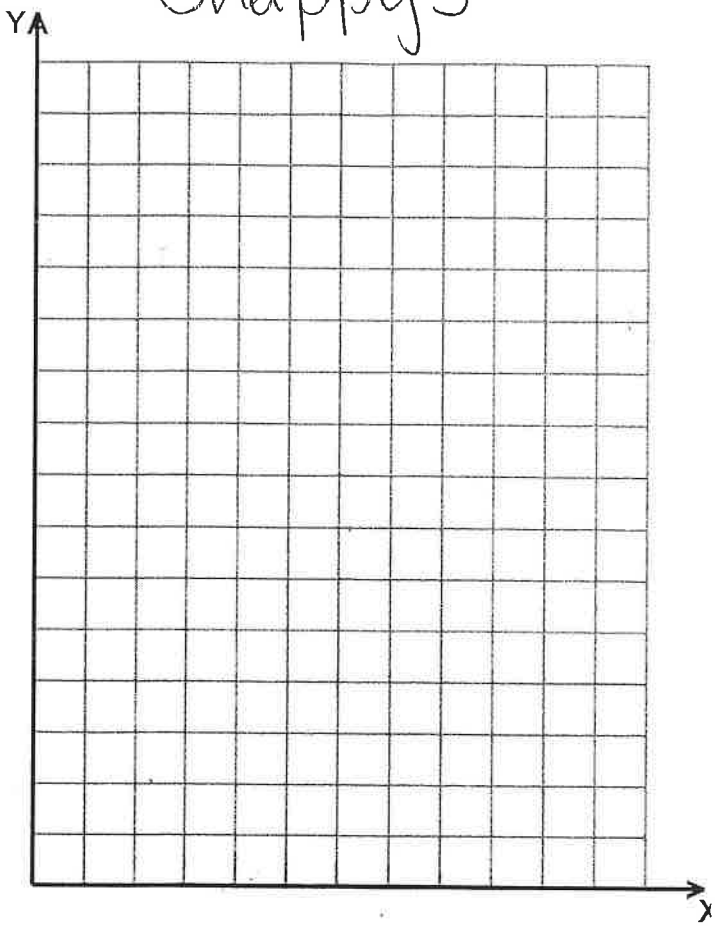
# toppings	cost $
0	
1	
5	
10	

5) Create a graph for each table to represent the total cost for any number of toppings. Make sure to create a reasonable scale for each axis and include labels.

Leonos



Snappy's



Papa John's