Introduction to Slope

Turn in completed extra credit NOW. Only will count NOW, not 4:10

Agenda

Warm-Up

Notes - Slope Book

Homework

Don't forget to come in for tutoring!

Mon PM

Tues AM/PM

ALL late HW due tmr!

Warm-Up

To answer the following questions think about when you used the CBR

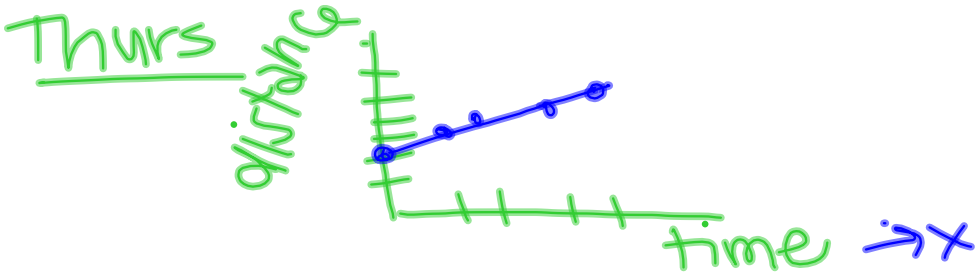
1. How did you "walk" to generate a steep line? faster
2. The flatter the line, the slower I "walked".
3. If you stood still (no movement), what did the graph look like? flat line

The table below shows Monica's "walk".
Plot the points on Thursday, then answer the questions.

Time (s)	Distance (ft) from CBR
0	2
1	3
2	4
3	5
4	6

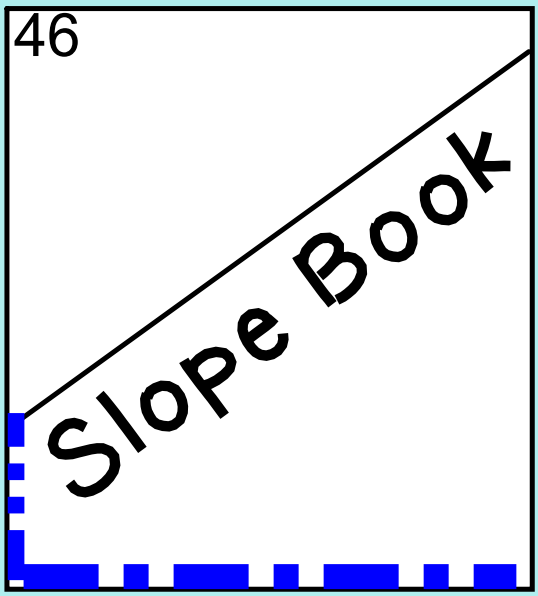
+1 +1

4. Where was Monica when the time was 0? 2 ft
5. Is she getting closer or farther from the CBR? farther
6. What would be the independent variable? time
7. What would be the dependent variable? distance
8. What was the growth rate based on the data in the table? 1
9. The rate of growth (change) that Monica "walked" was 1 ft every 1 sec.



We are making a pocket on page 46.

Take page 47/48 and fold it down. Glue or tape the bottom and small side down to make the pocket. Your slope book will go into this pocket.



Slope Book

How we will take notes for the next week!

Cut along the dotted lines on every page to see the tabs on the right.

Keep up with your slope book.

Slope: Rate of change which compares the amount of change in the dependent variable to the amount of change in the independent variable

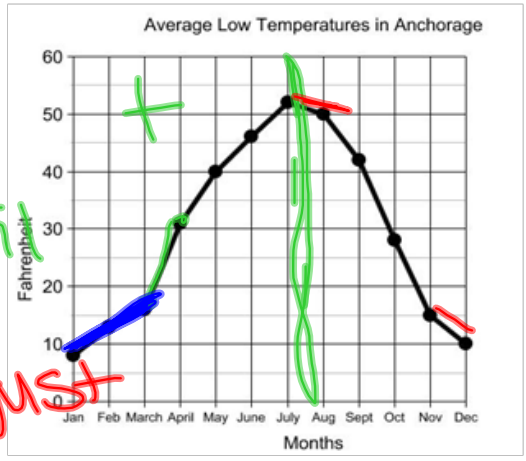
$\frac{y}{x}$

H O Y

Horizontal — (zero) slope — = equation, y-intercept

Vertical — Undefined slope — X = equation, x-intercept

The graph to the right shows the average low temperatures in Anchorage, Alaska.



A. Between which two months was the positive rate of change (slope) the greatest?

March to April

B. Between which two months did the temperature decrease at the slowest rate?

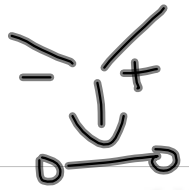
July to August

C. Use two terms to describe the rate of change from January to March.

- positive slope
- increasing

Types of Slope...

Types of Slope



Positive Slope
Rises from left to right

Negative Slope
falls from left to right

GRADES

Quiz averages

2nd - 73; 1 missing

3rd - 74; 3 missing

4th - 64

5th - 68; 6 missing

7th - 62

Grade on this progress report - grade on report card UNLESS...

- Finish test corrections by Tues 5PM (Mon PM, Tues AM/PM)
- Turn in missing HW (2.3, F/R, 2.4)
- Bathroom Passes
- You turned in extra credit today

Algebra I - Unit 3

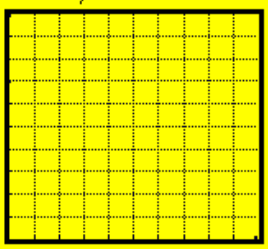
Practice – Introduction to Slope **No Textbook Correlation**

Name _____ Date _____ Period _____

Fill out the table for each scenario, label the axes, graph the situation, and identify the slope type.

1. Jose' started 2 feet away from the CBR and walked away at a rate of 1.5 ft / sec.

Time (s)	Distance from CBR (ft)
0	
1	
2	
3	

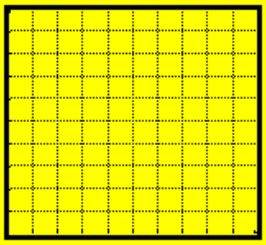


Positive, negative, zero or no slope?

_____

2. Brenna is walking away from the CBR at a rate of 3 feet per second. You missed where she started, but you know that she was at the 4 foot mark when the timer called out the 1st second.

Time (s)	Distance from CBR (ft)
0	
1	
2	
3	



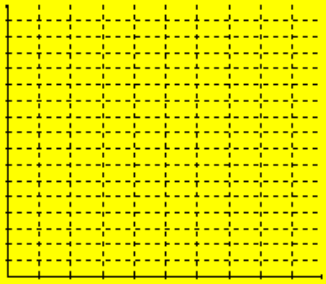
A. How far away from the CBR did Brenna start? _____

B. What type of slope does this "walk" represent? _____

3. Describe the differences between Jose's and Brenna's "walk".

4. Alex was walking toward the motion detector at 2 feet per second. You missed where he started, but you know that he was at the 8 foot mark when the timer called out the 4th second.

Time (s)	Distance from CBR (ft)
0	
1	
2	
3	
4	
5	



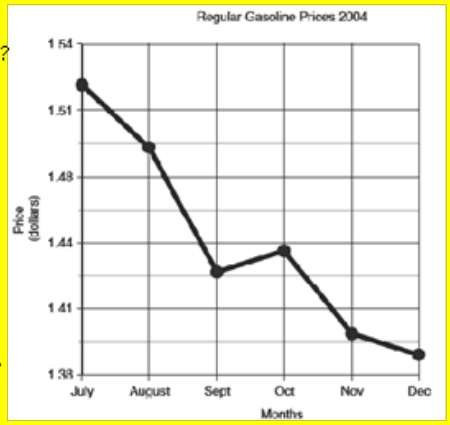
A. How far away from the CBR did Alex start? _____

B. What type of slope does this "walk" represent? _____

5. Describe the difference between Brenna's and Alex's "walk".

Algebra I - Unit 3

The graph below tracks regular gasoline prices from July 2004 to December 2004. Use the graph to answer questions 6-8. Select the best answer.



6. During which time interval did the cost decrease at the greatest rate?
   - A July to August
   - B August to September
   - C September to October
   - D October to November

7. During which time interval was the slope positive?
   - A July to August
   - B August to September
   - C September to October
   - D October to November

8. During which time interval did the cost decrease at the slowest rate?
   - A July to August
   - B August to September
   - C October to November
   - D November to December

9. On the graph to the right, sketch the following relationship.

   - Line A has a positive slope.
   - Line B has a positive slope.
   - Line B has a greater slope (rate of change) than line A.
   - {Make sure that you label the two lines.}