

A message from the District:

We worked hard to ensure that the Learning Plan provides accessibility for all learners. We hope that you see that there are options to engage learners at all levels. *These activities are not intended to replace the normal school day.* **There is now an expectation at this time to turn these documents in to your specific educators.** We want you to take time to enjoy family, be safe, stay healthy and find time within this week to engage in learning opportunities. Feel free to create a schedule that works for you and your family. We strongly encourage each student to participate in approximately two hours a day. We want your brain working and challenging yourself, while staying safe and having fun. (Have AP review plans)

THIS WEEK'S ACTIVITY:

Algebra 1 H Week 4

Activity #4 Slope and Linear Functions

4/13 - 4/17 2 Hours

*** Same guidelines as last week

- No grading
- Work with classmates or email me for help
- Do the best you can; if you have difficulty let me know

The Plan:

***Type your responses on this form (you each have your own copy) except for the Khan Academy Practice activities. Those do not need to be recorded.

***For any problems done on other paper please attach a picture to your submission

***Your responses are due by the end of the day on Friday

1. Use the Week 3 solutions which were posted on the GC this morning to do “corrections” from last week’s work. Then, write a reflection below explaining what you got wrong and were able to fix. You may also comment (brag?) about what you got correct. If you don’t have many problems wrong you must contact a friend and help them. You

may then reflect on what you helped them with, as well as your own strengths. If you didn't do last week's assignment then spend the first 30 minutes working on last week's problems. (30 Minutes)

2. What is a "linear function?" Explain and give 3 different examples in slope-intercept form. (5 Minutes)
3. When you are given two points explain how you would find the slope of the line which connects them. (5 Minutes)
4. a) Using the link below watch the video:

<https://www.khanacademy.org/math/algebra/x2f8bb11595b61c86:linear-equations-graphs/x2f8bb11595b61c86:applying-intercepts-and-slope/v/slope-intercepts-context>

4b) Then do the Practice titled: Using slopes and intercepts in context. (you do not have to record your answers here) (15 Minutes)

5. a) Using the link below watch the video:

<https://www.khanacademy.org/math/algebra/x2f8bb11595b61c86:linear-equations-graphs/x2f8bb11595b61c86:applying-intercepts-and-slope/v/slope-intercept-meaning-table>

b) Do the Practice titled: Linear Equations Word Problems: Tables (you do not need to record your answers here) (15 Minutes)

6. Explain the steps you would take to graph the following lines:
 - a) $y = -2x + 7$
 - b) $y = 5$ (10 Minutes)

7. a) Using the link below watch the video:

<https://www.khanacademy.org/math/algebra/x2f8bb11595b61c86:linear-equations-graphs/x2f8bb11595b61c86:applying-intercepts-and-slope/v/graphing-linear-functions-1>

b) Do the Practice titled: Graphing Linear Relationships Word Problems (15 Minutes)

8. Do the work for these on paper and submit pictures.

Write the equation of the line for each of the given conditions:

***Use point-slope formula; $y - y_1 = m(x - x_1)$

a) Passes through (3, 7) and has slope = - 2

b) Passes through (-3, 4) and (-1, 8)

c) Passes through (6, 5) and is parallel to $y = 2x - 4$

d) Passes through (4, 11) and is parallel to the y- axis

e) Passes through (-3, 6) and is horizontal (20 Minutes)

9. Describe what the graph of a line must look like if it has negative slope. What if the slope is undefined? (5 Minutes)