Inspiring Greatness

ISD

INDEPENDENCE SCHOOL DISTRICT

Math Virtual Learning

Algebra 1 S1

Review for Unit B

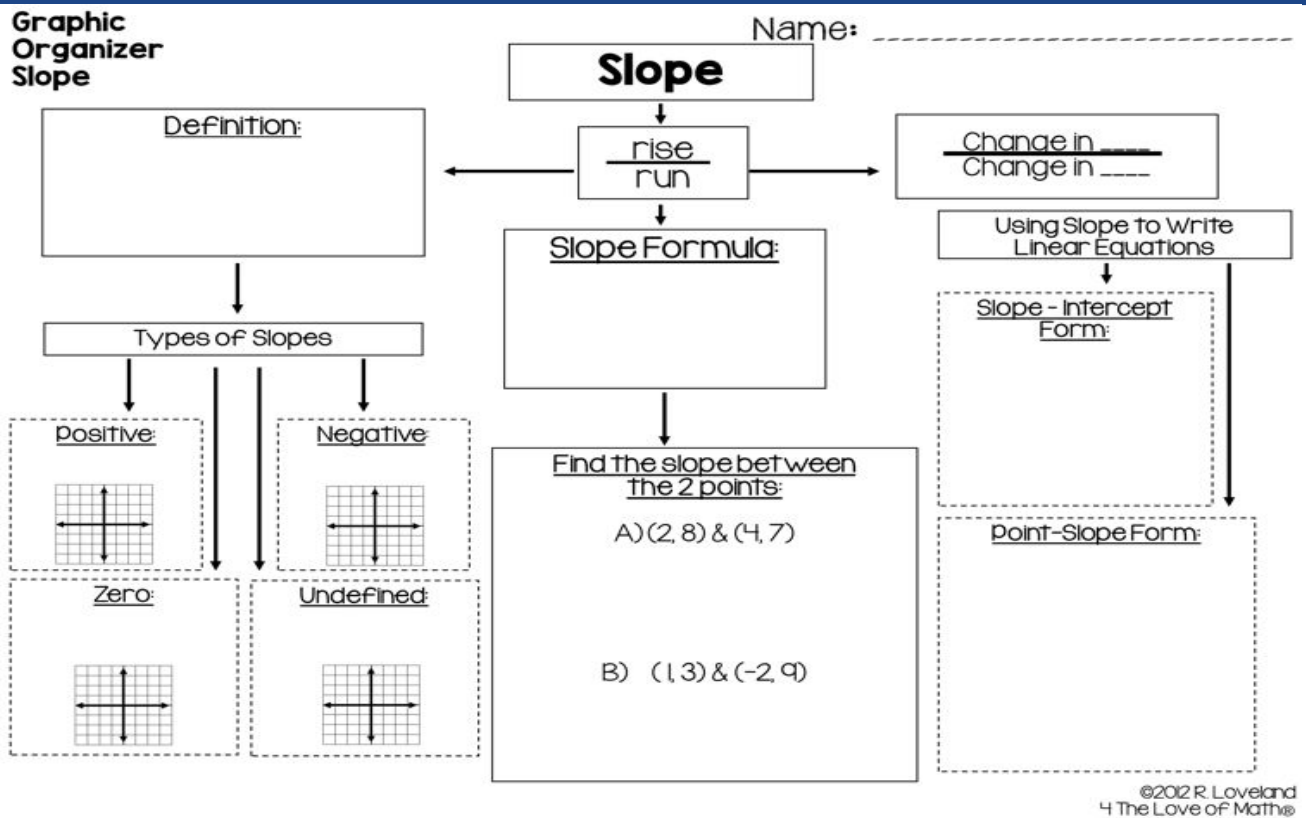
May 21, 2020

Algebra I S1
Lesson: May 21, 2020

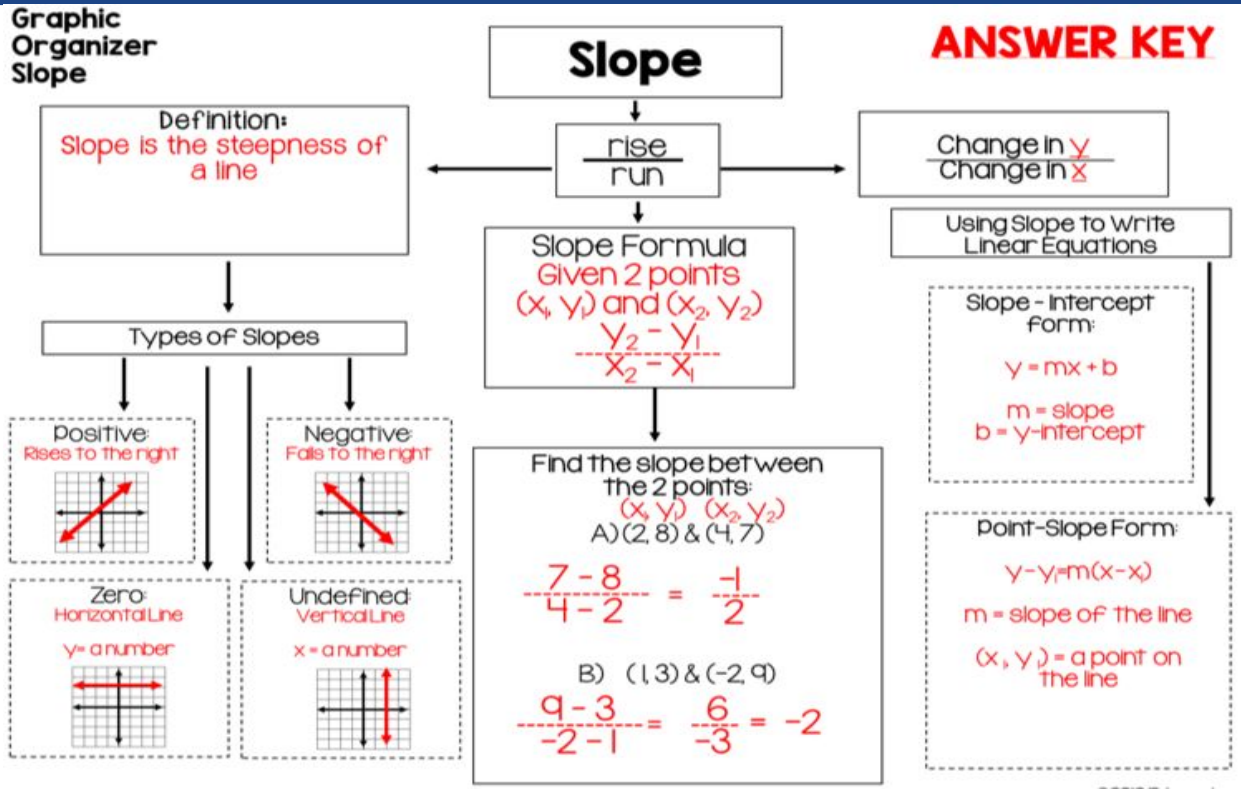
Objective/Learning Target:
Student will review Unit B concepts.

Review for Unit B

Copy and complete the organizer.

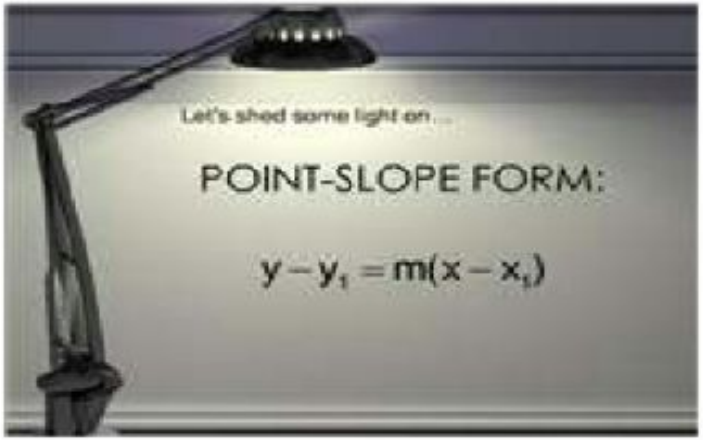


Review for Unit B



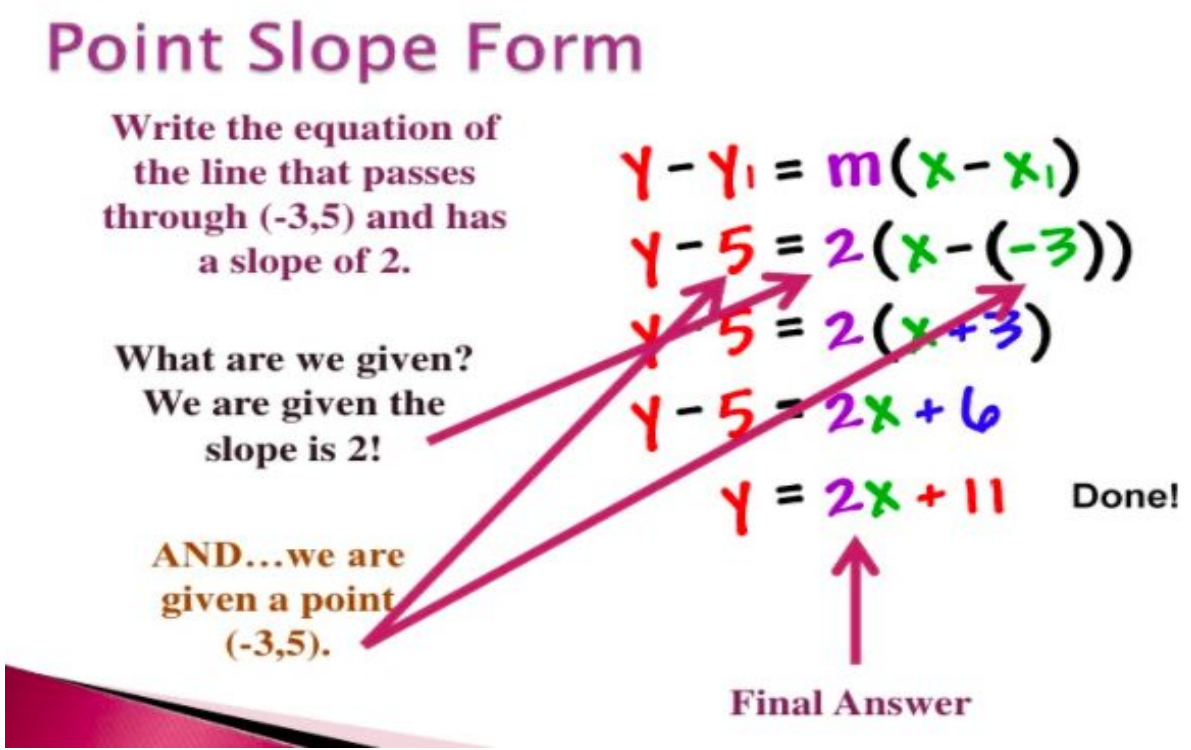
Review for Unit B

Writing Linear Equations



We use Point-Slope form, when we are given: a point and a slope!

Review for Unit B



Review for Unit B

Point Slope Form

Write the equation of the line that passes through (-3,5) and (-1,9) .

What are we given? We are given 2 points, but no slope!

Can we find the slope? Do we have enough info?

Yes, we can use…

$$m = \frac{9-5}{-1-(-3)} = \frac{4}{2} = 2$$

Review for Unit B

Point Slope Form

Write the equation of the line that passes through (-3,5) and (-1,9) .

Now that we know that the slope is 2, we can use either point to find the equation of the line.

$y - y_1 = m(x - x_1)$

$y - 5 = 2(x - (-3))$

$y - 5 = 2(x + 3)$

$y - 5 = 2x + 6$

$y = 2x + 11$ Done!

Review for Unit B

Writing Linear Functions

Summary

1. **When given the slope and y-intercept: $y=mx+b$.**
2. **When given 1 point and the slope, do point slope: $y - y_1=m(x-x_1)$.**
3. **When given 2 points, and no slope, one must find the slope ($m=y_2-y_1$ over x_2-x_1), then use either point for the point slope form.**

Writing Equations of Lines - Practice

Practice 1

Changes to slope and y-intercept notes

First open up calculator and then notes. Practice using calculator.

Calculator

Notes

Exit Pass

1. Without graphing describe how the line changes if the y-intercept is changed to 7

2. Without graphing describe how the line changes if the y-intercept is changed to –4

3. What happens to the line of $y = -x + 12$ when the slope is divided by 2?

(a) The line becomes steeper

(b) The line moves up 7 units

(c) The line becomes less steeper

(d) The line moves down 7 units

4. Without graphing describe how the line $y = 5x + 6$ changes if the slope is changed to –2