

JUDSON INDEPENDENT SCHOOL DISTRICT

JSTEM Academy

Kayone Bedford, Principal

9695 Schaefer Road

Converse, TX 78109

(210) 945-1159

Fax (210) 619-0421

Ms. Leary's Algebra 1
Summer Project
jleary@judsonisd.org

Dear Parents and Guardians: Attached are the summer curriculum review materials for Algebra I. This booklet was prepared by the JSTEM Academy Math department and contains topics that reflect content learned in prerequisite courses or that can be researched using Google. These materials must be completed and brought to class on the first day of school in August. Your child is required to complete this booklet over the summer. Thank you for your cooperation.

Sincerely,
Jennifer Leary

Turn in Options

Paper-print/draw the attached slides (3 total), hole punch, place in a folder with brads, turn in the folder on the first day of school
(August 16, 2023)

Digital- Use Google Slides or Kami to fill in the information, and turn in to Google Classroom by the first day of school (August 16, 2023)

Keep in mind that you turn in your Chromebook over the summer

Linear ($y=mx+b$)

1. What do the variables mean in the formula?
m-
b-
2. What does a linear graph look like? (Find an example online)
3. What type of situation can be represented with a linear equation?

Quadratic ($y=ax^2+bx+c$)

1. What do the variables mean in the formula?
a, b, c-
x-
2. What does a quadratic graph look like? (Find an example online)
3. What type of situation can be represented with a quadratic equation?

Exponential ($y=ab^x$)

1. What do the variables mean in the formula?
a-
b-
x-
2. What does an exponential graph look like? (Find an example online)
3. What type of situation can be represented with an exponential equation?

Translate Algebraic Expressions

1) Two-fifths of k is subtracted from 4

2) Three-fifths of the sum of m and 6 minus the product of 8 and n

3) Five-sixths of the sum of 3 and b

4) m is added to 5

5) 5 times h

6) The sum of two-fifths of k and five-sixths of m , minus 2

7) Take away 9 from y

8) Sum of 7 and b

Identify Slope and Y-Intercept from Equations

1) $y = 3x + 2$

slope = _____

y-intercept = _____

2) $y = -x + 3$

slope = _____

y-intercept = _____

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

slope = _____

y-intercept = _____

4) $y = -2x + 2$

slope = _____

y-intercept = _____

5) $y = \frac{2}{3}x + 1$

slope = _____

y-intercept = _____

6) $y = 4x - 10$

slope = _____

y-intercept = _____

7) $y = -3x - 15$

slope = _____

y-intercept = _____

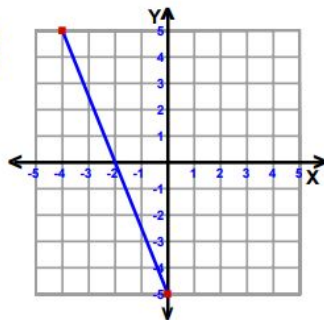
8) $y = \frac{7}{4}x - 3$

slope = _____

y-intercept = _____

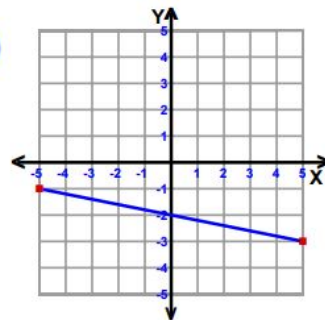
Finding Slope From a Line

1)



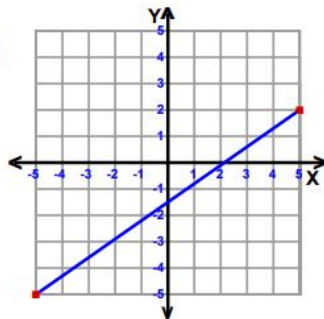
slope = _____

2)



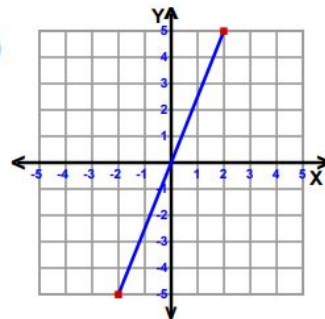
slope = _____

3)



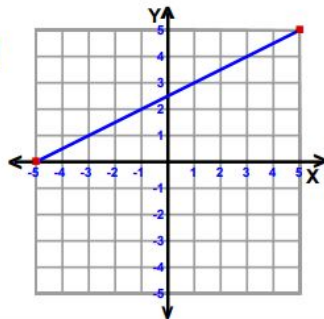
slope = _____

4)



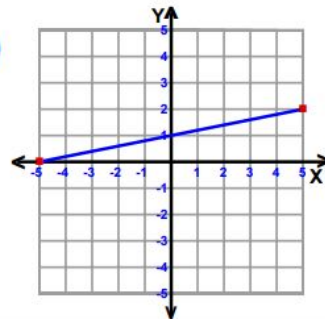
slope = _____

5)



slope = _____

6)



slope = _____

Finding
Slope
From a Pair
of Points
(Must
Show
Work to
get credit)

1) $(-5, -2)$ $(5, 1)$ slope = _____

2) $(-5, -5)$ $(-1, 5)$ slope = _____

3) $(5, -5)$ $(-4, 5)$ slope = _____

4) $(-1, 4)$ $(1, 1)$ slope = _____

5) $(3, -5)$ $(2, 5)$ slope = _____

6) $(3, 4)$ $(-2, 3)$ slope = _____