***OBJECTIVES:***

***Understand linear models. Be able to do the following:***

* Know how to find the intersection of 2 lines.
* Use slope-intercept intercept form.
* Use point-slope linear form.
* Use general linear form to graph a line.
* Use general linear form to find the x-intercept, the y-intercept, and the slope of the line.
* Know and use the definition of slope.
* Understand the concept of slope: positive slope, negative slope, indeterminant slope.
* Know the relationship between the slopes of 2 parallel lines.
* Know the relationship between the slopes of 2 perpendicular lines

***MONDAY (8.19.24)***

**Discuss the previously assigned homework/classwork, which is below:**

* Solve the following systems of equations using **rref (aka, the Gauss-Jordan Elimination Matrix Method) on** your TI-84 calculator:
1. 6x + 2y = 8 2) 2x + 3y = 12 3) 2x + 3y = 12

3x + y = 4 - 3x + 2y = 12 2x + 3y = 14

**Take the Linear Models Test.**

**Class Work/Homework:**

* Solve the following system of equations using a matrix and the **rref** feature on your TI-84.

 **x − 2y + 3z = 7**

 **2x + y + z = 4**

**-3x + 2y − 2z = -10**

***WEDNESDAY (8.21.24****)*

Turn in your previously assigned homework.

**NEW OBJECTIVES**

* Solve linear inequalities.
* Solve a system of linear inequalities.

**Take notes.**

**Class Work/Homework:**

**(1 – 7) Solve and graph the solutions:**

**(1)**

****

(2)

 5(*x* - 3) > 10

(3)

 

(4)

 4(*x* - 1) > 3(*x* - 2)

(5)

 

(6)

 

(7)

 5 + *x* > 7 **or** *x* - 3 < 5

(8**)**

 -12 < 2x + 4 < 28

|  |  |
| --- | --- |
| (9) Graph this system of linear inequalities and label the solution by shading its region. |    *y*< 2*x* - 6    **and**    *y* > -3*x* + 4 |

***FRIDAY (8.23.24)***

**Discuss the previously assigned work.**

**Study for a Quiz (Solving Linear Inequalities) to be taken on Monday, 8.26.24.**