***TUESDAY, 8.13.24:***

**Turn in** in your completed, signed, and dated *Classroom/Group Procedures Agreement*.

**Discuss** the pre-assessment that was assigned on Thursday, 8.8.24.

**HOMEWORK:** Pages 92, ***Exercises*** (#1-8).

***THURSDAY, 8.15.24:***

**Discuss** the previously assigned homework.

**CLASS WORK:**

1. Define *relation*.
2. Define *function.*
3. What is *The Vertical Line Test*?

**HOMEWORK:** Pages 112, 113***, Exercises*** (#1 – 7 odd \_\_ omit finding the domain; #11 - 21 odd\_\_ omit finding the domain).

***FRIDAY, 8.16.24:***

**Discuss** the previously assigned homework.

**OBJECTIVE**: Demonstrate an understanding of the characteristics of functions with an emphasis on linear functions.

**Technology:** Graphing calculator (TI-83 or TI-84).

* **NOTES\_\_\_\_\_ Linear Models.**

1. Formula for finding the **Slope of a Line**: slope = m = y2 – y1 .

x2 – x1

1. **Slope-Intercept Linear Form**: y = mx + b, where *m* is the slope and *b* is the y-intercept.
2. **Point Slope Linear Form**: y – y1 = m (x – x1), where *m* is the slope and (*x1, y*1) is any point on the line.
3. **General Linear Form:** Ax + By = C, where m = -A/B, the x-intercept = C/A, and the y-intercept = C/B.

**(5)** 2 lines that are **parallel** will have the same slope.

1. 2 lines that are **perpendicular** will have slopes that are negative reciprocals of each other.

Also, the product of their slopes will be -1.

**CLASS WORK/HOMEWORK: Show all work for #1 – 8 below.**

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| --- | --- |
| **(1)**  **Find the slope and *y*-intercept for the equation 3*y* = -9*x* + 15.**  (a) Use slope-intercept linear form to do this.  (b) Use general linear form to do this. | **(2)**  **Find the equation of the line whose slope is 4 and crosses the *y*-axis at (0,2).** |
| **(3)**  **Given that the slope of a line is -3 and the line passes through the point (-2,4), write the equation of the line.**  a) Use slope-intercept linear form to do this.  b) Use point-slope linear form to do this. | **(4)**  **Find the slope of the line that passes through the points (-3, 5) and (-5, -8).** |
| **(5)**  **Given that the line is parallel to *y* = 4*x* + 5 and passes through the point (-2, 4), write the equation of the line.** | **(6)**  **Given 2*y* = 6*x* + 12 and 3*y* + *x* = 15, determine if the lines are parallel, perpendicular, or neither.** |
| **(7) (a) Graph x = 4.**  **(7) (b) Graph y = 4.**  **(7) (c) Graph x = 0.**  **(7) (d) Graph y = 0.** | **(8) (a) Graph y = x/3 + 5.**  **(8) (b) Graph -2x + 3y = 6.** |