Algebra I
Mrs. Davison
Algebra 1- Week 3 Homework
Monday-

$$
f(x)=|x|-1
$$

a:
___ vertex: (0, )


Tuesday-

$$
f(x)=-2|x|+5
$$

a: $\qquad$ vertex: ( 0, )


$$
f(x)=1 / 3|x-2|-4
$$

a:

$$
: \quad \text { y vertex: }(0, \quad)
$$



## Wednesday, Thursday- Finish up 'What’s Your Function' Performance Task.

We have spent the beginning of the school year learning how to read, create and apply different types of functions to better understand our world. This project will be part of the demonstration of your understanding of the unit concepts.

Each project must contain the following elements:
I. Typed up written response that includes the following:
-Clear Title for the project (1 point)
-Identification and explanation of the variables (independent and dependent) in your function (4 point)
-Explanation of the domain and range for your function (4 points)
-Description of the relationship in the function (discrete or continuous) and why (4 points)
-Identify what type of function best describes your function (linear, exponential, quadratic) and why (2 points)
II. Reflection Critique of the process (3 points)
-What the group did well on the project (relative strengths)

- What the group can work on/improve upon for next time
- What the group learned about functions and themselves
III. Display of your function using function notation (5 points)
IV. Graph of your function (10 points) - include title, label axes, appropriate scale and units
V. Table of values for your function (7 points) - include at least 5 inputs/outputs and correct labeling.
$\qquad$ Date: $\qquad$ Block: $\qquad$

| What's Your Function Project Rubric |  |  |  |  |  |
| :---: | :--- | :--- | :--- | :--- | :---: |
| 1. <br> Elaboration <br> and <br> Clarification | Presentations demonstrates <br> excellent elaboration and <br> use of relevant detail to <br> clarify main points in <br> presentation | Most parts of presentation <br> elaborate and use evidence <br> to clarify the main points of <br> the presentation | Few parts of the project <br> are elaborated on and <br> only main ideas are <br> presented without <br> proper clarification <br> and/or follow-up | Many parts of the <br> presentation fail to <br> elaborate on or <br> identify the main idea <br> being made in the <br> project. |  |
| 2. <br> Justification <br> and use of <br> evidence | Detailed evidence is given to <br> support answer and all of <br> the information and analysis <br> is correct, insightful, AND <br> relevant to the project | Gives evidence to support <br> the presentation, but only <br> minimally analyzes the <br> evidence AND/OR is off <br> topic at times | Gives evidence to <br> support the <br> presentation, but some <br> of the information is <br> incorrect or the analysis <br> is weak | Gives inappropriate <br> evidence to support <br> the presentation OR <br> fails to support the <br> presentation |  |
| 3. Group |  |  |  |  |  |
| Work | The group demonstrated <br> excellent collaboration and <br> interpersonal skills in <br> completing the project. | The group demonstrated <br> collaboration and <br> interpersonal skills in <br> completing the project. | The group demonstrated <br> limited collaboration <br> and interpersonal skills <br> in completing the <br> project. | The group <br> demonstrated <br> minimal collaboration <br> and interpersonal <br> skills which interfered <br> with the completion <br> of the project. |  |

## 4. Content (40 points - see Performance Task list for details):

Total Points (out of 52):
Strengths:

Grade:
Areas for revision:

