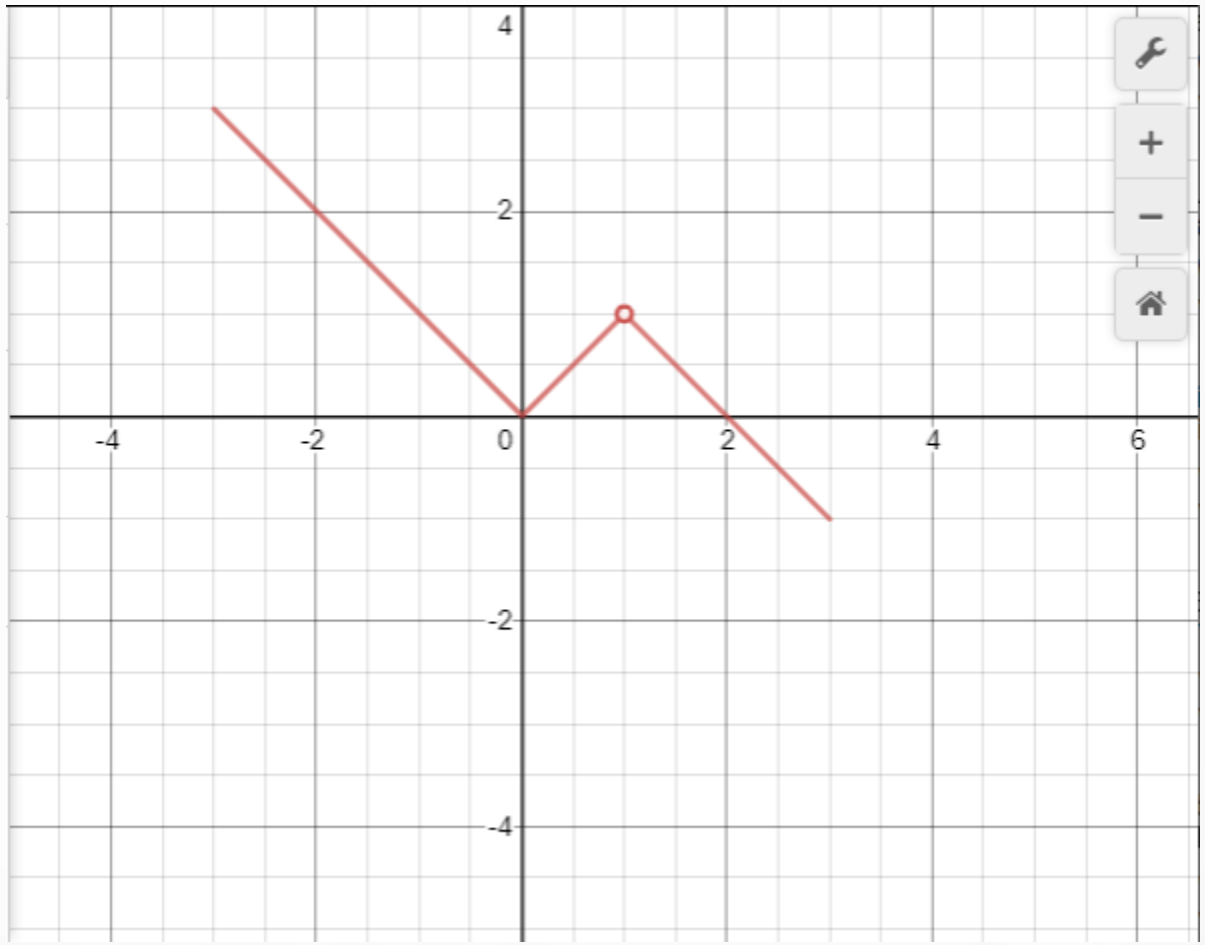
Do Now (8/28 & 8/29)

Describe the transformations, make a table, and draw the new graph for $\frac{1}{2}f(-3x) - 2$



Lesson 1-2 Example:

Given the function $f(x) = x^2 - 3x + 5$, what is the equation for g in which f(x) is translated up 3 units, translated to the right 2 units, and reflected across the y-axis.

Directions

-Work on Do Now (on your handout)

-Turn in Cut and paste activity (from a couple of classes ago on function transformations) if you haven't done so already. If you were not here on that day, you have to get it done and turned in. Grab some from the extra copies bin

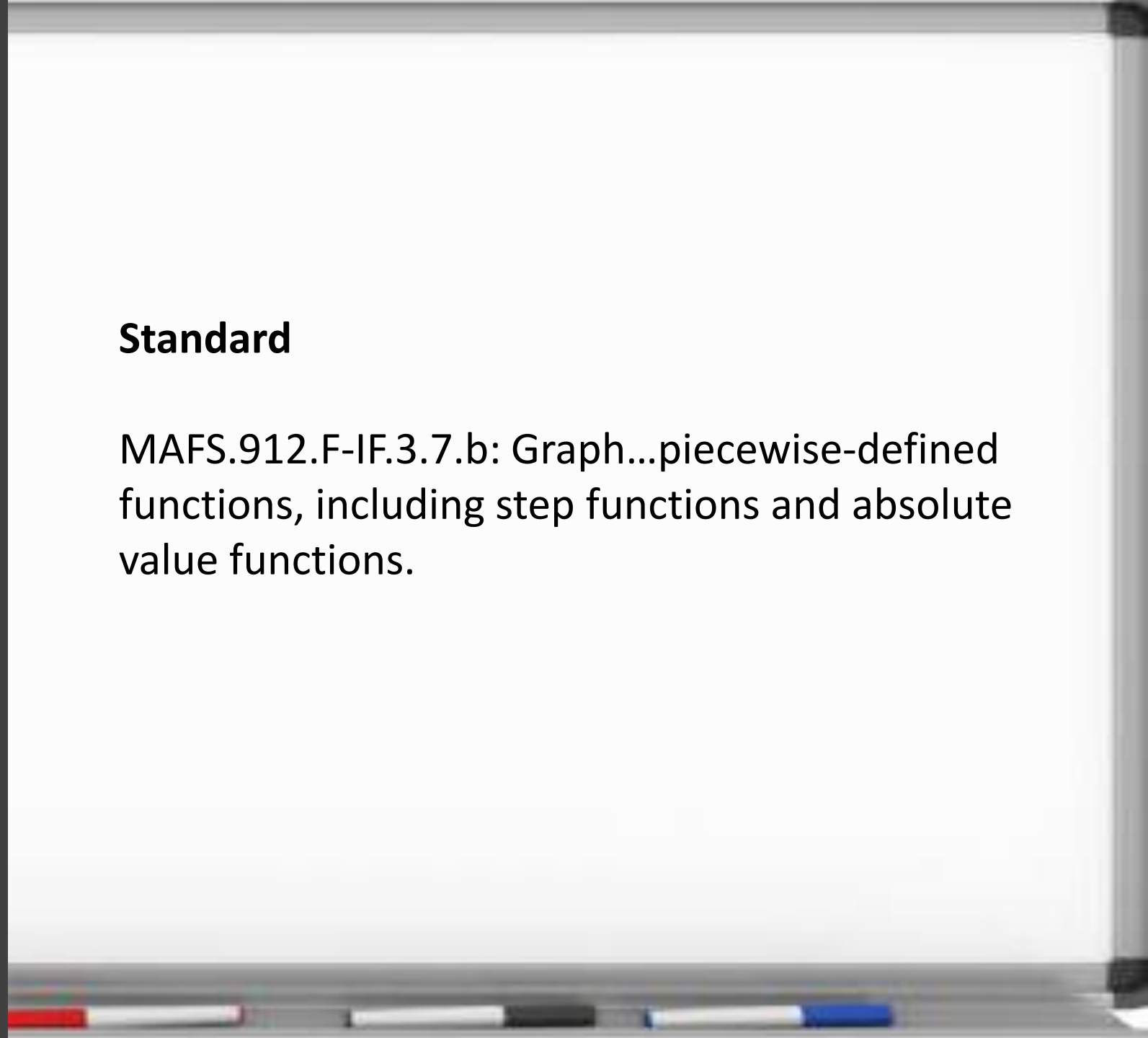
1-3
Piecewise-Defined Functions

I CAN…

Graph and interpret piecewise-defined functions

Standard

MAFS.912.F-IF.3.7.b: Graph…piecewise-defined functions, including step functions and absolute value functions.

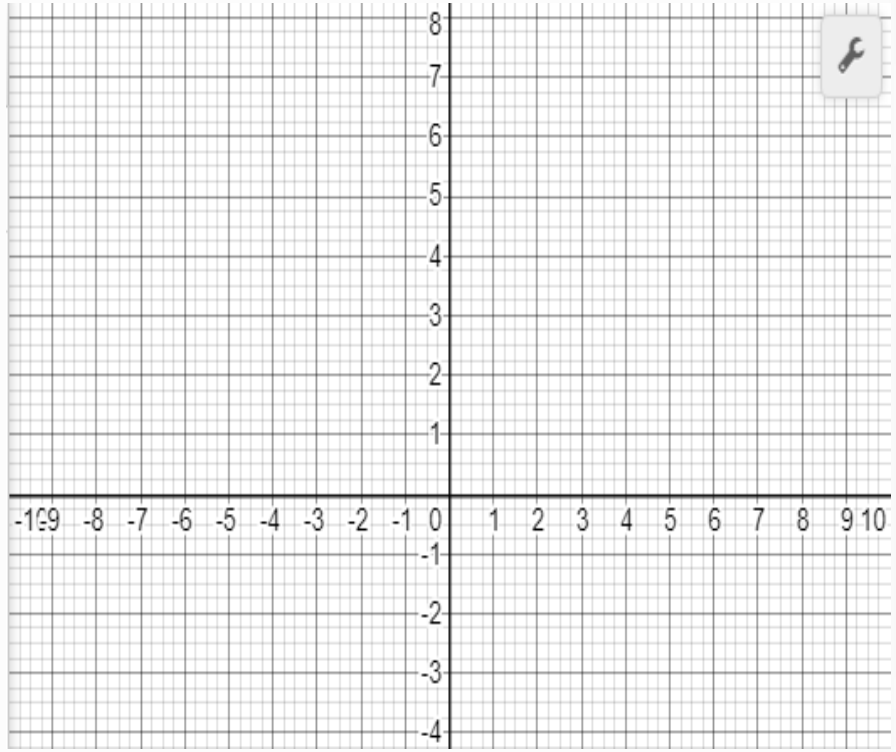


Example 1

a) Graph the following piecewise function

$$f(x) = \begin{cases} 2x + 1 & -3 \leq x < 1 \\ x^2 + 2 & 1 < x < 2 \\ 3 & x \geq 2 \end{cases}$$

b) What's the domain and range?

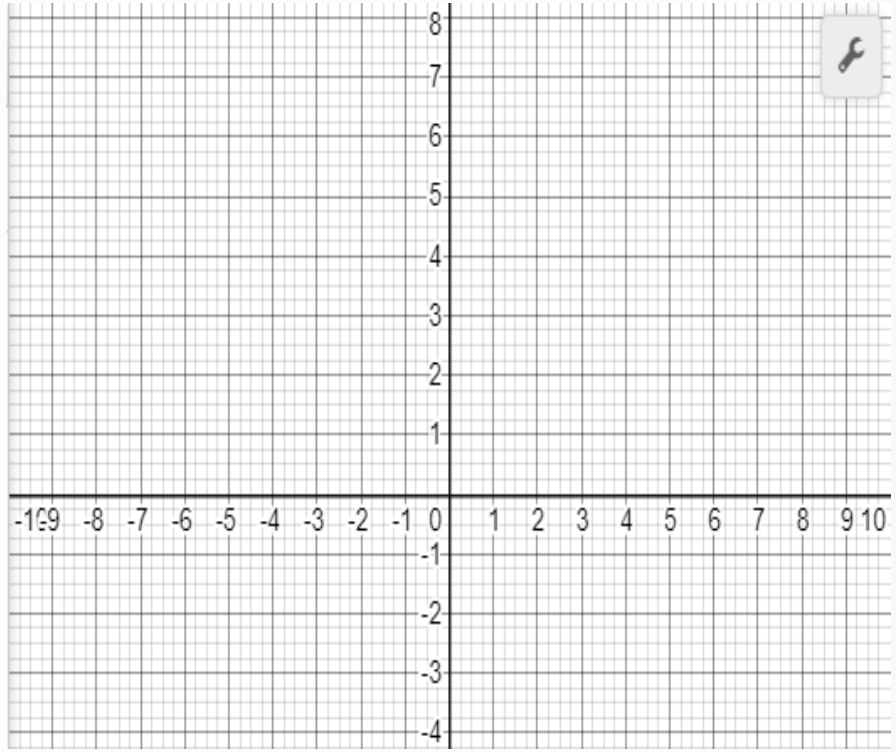


Try It!

a) Graph the following piecewise function:

$$f(x) = \begin{cases} -3x - 1 & x < -1 \\ 2x^2 & -1 \leq x < 2 \\ -1 & x > 4 \end{cases}$$

b) What's the domain and range?



Classwork

1) Scavenger Hunt Activity (finish and turn in next class)

Homework

- Online: 1-2 Practice Problem Set #1 (due 9/2 11:59 pm)
- Finish 1-3 Notes (due next class)
- Materials check (binder and TI-30XIIS or comparable calculator) on 8/30 & 9/3

Quiz: > 1-1 & 1-2 on 8/30 & 9/3