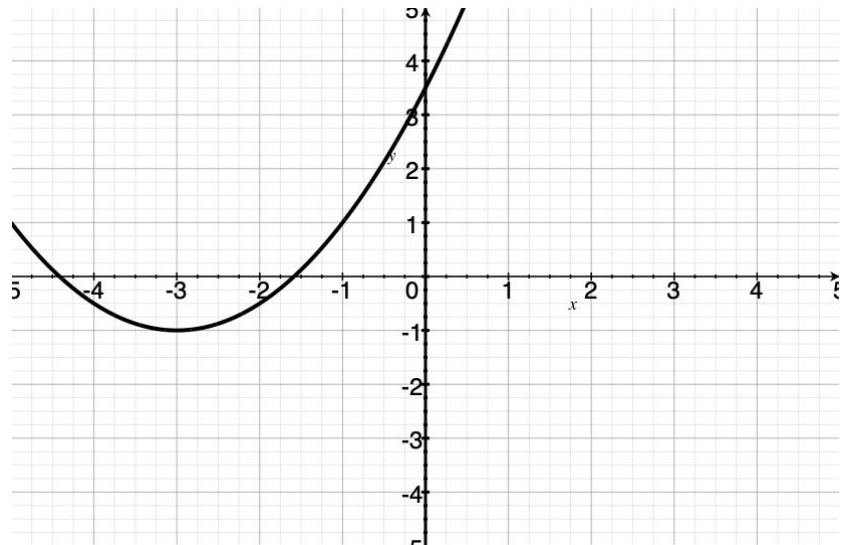# Quiz 2

This is a two-stage quiz. During the first stage, you have 15 minutes to use your knowledge & calculator to take this quiz. In the second stage, you are welcome to use your books, notes, and students in the class to retake the same quiz. You have 15 min. to complete the quiz and to build one solution to be turned in.

Show *all* your work. Reasonable supporting work must be shown for any partial credit.

1. Consider the function f graphed on the right.

   (a) [2] Find the range of f

   (b) [3] Find the algebraic rule of f.

   (c) [1] Estimate $f(f(-3))$.

   (d) [1] Estimate $(f + f)(-3)$.

2. At one point, I needed to contain my toddler in a rectangular region along one of the walls in my house. I had 10 feet of soft fencing materials.

   (a) [1] Draw a picture of the situation.

   (b) [2] Find an algebraic formula for the area of the region as a function of just one variable.