Quiz 3 **Name:** _____
Week 4: 02/04/2020
Math 285: Spring 2020
Instructor: Garrett Hartshaw

Instructions:
Please answer the questions below. Show all your work. You may use a TI-84/85 (or equivalent) calculator.

Problem 1. (5 points) Graph the function from 0 to 2π: $f(x) = 2\cos(x)$.

Problem 2. (5 points) The following is a graph of $f(x)$. Determine the following limits, if they exist: $\lim_{x\to 0^+} f(x)$, $\lim_{x\to 0^-} f(x)$, and $\lim_{x\to 0} f(x)$.

Problem 3. (5 points) Find the limit, if it exists: $\lim_{x\to 3} \dfrac{x^2-9}{x-3}$.

Problem 4. (5 points) Find the limit, if it exists: $\lim_{h\to 0} \dfrac{\sqrt{x+h}-\sqrt{x}}{h}$.