

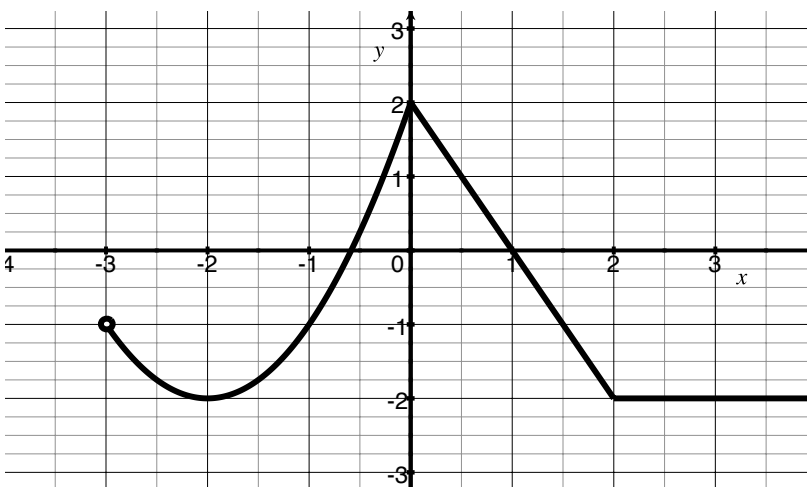
# TMATH 124: Concept Check Day 5

Be sure to write down your ideas (numerically, algebraically, or geometrically) so that you can earn credit for your work!! To earn full marks for this you must attempt all problems.

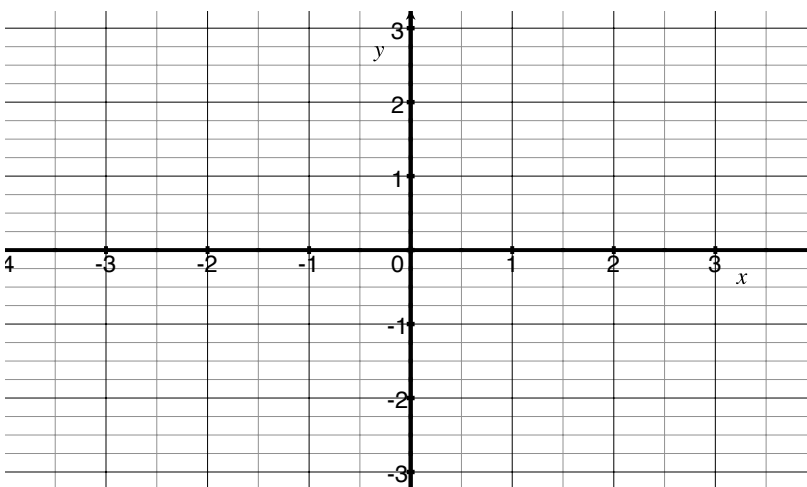
1. Use the piece-wise defined function of  $g(x)$  below to answer the following.

(a) Estimate  $g'(1)$

(b) Estimate  $g'(0)$



(c) Sketch the graph of the *derivative* of  $g$ .



2. Set up (*but do not compute!*) how to algebraically find the derivative of

$$f(x) = 8x - 5x^2$$