

Quiz 5A: Algebra of functions

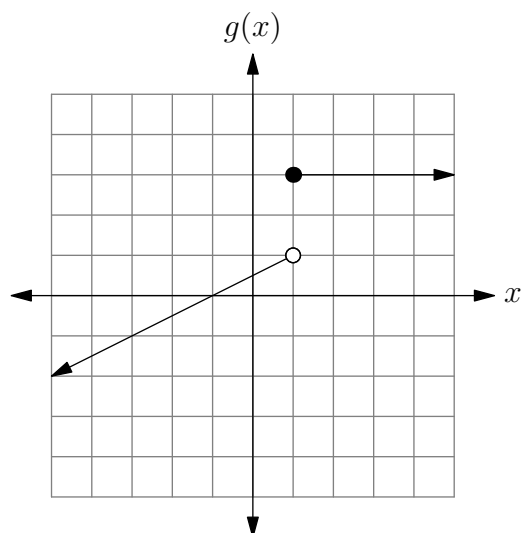
MATH 1110, FALL 2017

NAME:

1. (6 points) Define the function $f(x) = 6 - 2x^2$. Simplify the following difference quotient.

$$\frac{f(x+h) - f(x)}{h}$$

2. (8 points) Write the formula for the piecewise function $g(x)$ shown in the graph.



3. (6 points) The following graph shows a function $f(x)$. Estimate the rate of change for this function over the interval $x = -1$ to $x = 2$.

