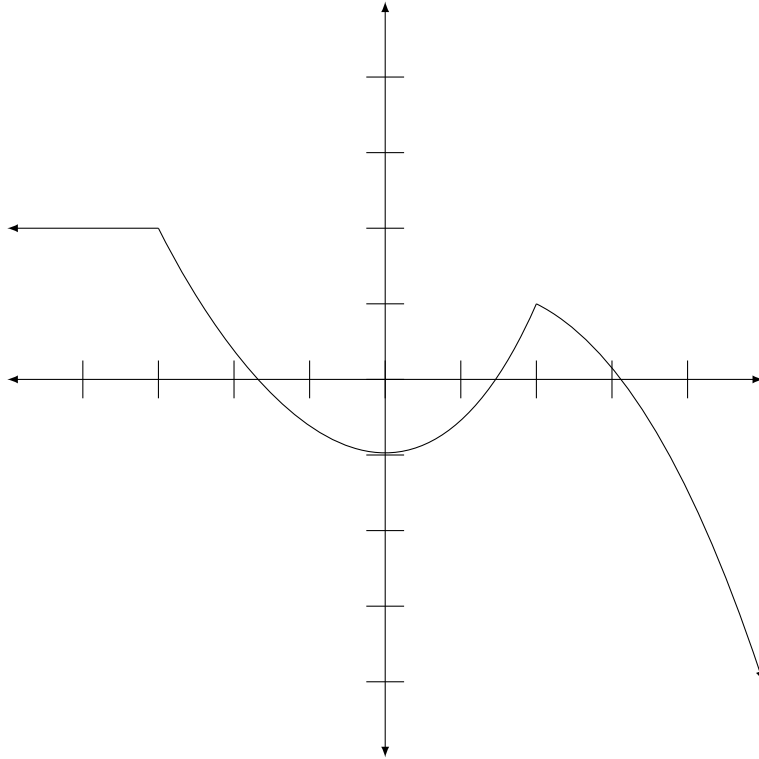Quiz 9

1. Use the following graph of the function $f(x)$ to answer the questions.

   a) Find the relative maximum(s) _____
   b) Find the relative minimum(s) _____
   c) Find the relative maximum value(s)_____
   d) Find the relative minimum value(s) _____
   e) Where is $f(x)$ increasing? _____
   f) Where is $f(x)$ decreasing? _____
   g) $f(2) =$ _____
   h) $f(-4) =$ _____

2. Let $f(x) = 2x - 4$ and $g(x) = x^2$. Find...

   a) $(f + g)(2)$
   b) $(f \circ g)(2)$

3. Graph the following piecewise function on the axes provided

$$g(x) = \begin{cases} -|x| & x < 1 \\ -2x + 4 & x \geq 1 \end{cases}$$