MA 137 Worksheet #9

Section 3.2
9/15/20

1. If f and g are continuous functions with $f(3) = 6$ and $\lim_{x\to 3}[7g(x)/f(x)] = 14$, find $g(3)$.

2. Find all values of c such that the function

$$f(x) = \begin{cases} \dfrac{x^2-4}{x-2} & \text{if } x < 2 \\ (c^2-c)x - 8 & \text{if } x \geq 2 \end{cases}$$

is continuous everywhere.

3. Give three examples of types of discontinuity. You don't need to name them, but you should be able to draw them.