

Math 157 - Quiz 3

September 9, 2015

Name _____

Score _____

Show all work to receive full credit. Supply explanations when necessary.

1. (3 points) Use a table of values to estimate the following limit. Your table must show function values at six or more points.

$$\lim_{x \rightarrow 4} \frac{12 + x - x^2}{2 - \sqrt{x}}$$

2. (2.5 points) Use algebra to find the limit analytically.

$$\lim_{h \rightarrow 0} \frac{(h - 2)^2 - 4}{h}$$

3. (2.5 points) Use algebra to find the limit analytically.

$$\lim_{x \rightarrow -7} \frac{x^2 + 3x - 28}{2x + 14}$$

4. (2 points) Let $f(x) = 8x^3 - 7x^2 + 3x - 10$. Compute the limit of $f(x)$ as $x \rightarrow -2$.