Math 131 - Quiz 3

Name _____

September 7, 2023

Score _____

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

1. (9 points) Evaluate each limit analytically. Show all work.

   (a) $\lim\limits_{x \to 9} \dfrac{x - 9}{3 - \sqrt{x}}$

   (b) $\lim\limits_{w \to -2} \dfrac{(w + 3)^2 - w^2 + 3}{w + 2}$

   (c) $\lim\limits_{x \to 0} \dfrac{\sin 6x}{7x}$

2. (1 point) Suppose $\lim\limits_{x \to 5} f(x) = 13$. What can you say about $\lim\limits_{x \to 5^-} f(x)$?