

---

Name: \_\_\_\_\_

**Directions:** Closed book, closed notes, no calculators.

By submitting this quiz you affirm that you agree with this statement: *On my honor, I have neither given nor received unauthorized aid on this assignment, and I pledge that I am in compliance with the VCU Honor System.*

---

1. (20 points) Use the limit definition  $f'(x) = \lim_{w \rightarrow x} \frac{f(w) - f(x)}{w - x}$  to find the derivative of  $f(x) = \frac{1}{3x - 1}$ .

Please present your work in a linear, organized fashion. Show all steps.