MATH 101-26 (101)
QUIZ # 3

NAME: ..... ID. #: . . . . . .

---

Q1. Let

$$f(x) = \begin{cases} 3x^2 - x, & \text{for } x < 2 \\ 10 & \text{for } x = 2 \\ 28 - 9x & \text{for } x > 2. \end{cases}$$

Is $f$ continuous at $x = 2$? **Why**?

---

Q2. Let

$$f(x) = \frac{x^2 - 4}{x - 2} \text{ , then } \lim_{x \to 2} f(x) = 4.$$

If $\epsilon = 0.05$, find a number $\delta$ such that:

$|f(x) - 4| < \epsilon$ if $0 < |x - 2| < \delta$