

MA 16010 Quiz 3 (Lessons 4-6)

Write your name, section number (399 for 8:30, 418 for 9:30), and quiz number on the top of your quiz, **front and back**.

You may use a one-line calculator.

1. Evaluate the limit:

$$\lim_{x \rightarrow 3} \frac{x^2 - 2x - 3}{x^2 - 3x}$$

$\frac{0}{0}$ $x^2 - 3x = x(x-3)$
 $x^2 - 2x - 3 = (x-3)(x+1)$

$$= \lim_{x \rightarrow 3} \frac{(x-3)(x+1)}{(x-3)x} = \lim_{x \rightarrow 3} \frac{x+1}{x} = \frac{4}{3}$$

2. Classify all points of discontinuity of the function whose graph is given below. (No need to copy the graph, enough to list the x -values and type of discontinuity.)

