FIRST NATIONS UNIVERSITY OF CANADA
DEPARTMENT OF SCIENCE
MATH 110 200930 Quiz 1

Time: 20 minutes   Name: _____
Instructor: Dr. Edward Doolittle   Student #: _____

(marks)   Please do questions 1 and 2. You have 10 minutes to do each question, for a total of 20 minutes for
           the quiz. A non-programmable calculator of the type mentioned in the course outline is allowed.

(10)   1.   (a) Let $f(x) = \dfrac{9-x}{\sqrt{x}-3}$. Use your calculator to fill in the following table of values to 4
                 decimal points.

x	$9-x$	$\sqrt{x}-3$	$f(x)$
10.00			
9.10			
9.01			
8.99			
8.90			
8.00			

           (b) Use the table of values to estimate the limit $\displaystyle\lim_{x\to 9} \frac{9-x}{\sqrt{x}-3}$.

(10) 2. Find the vertical asymptotes (if any) of the function $y = \dfrac{x^2 + x - 6}{x - 3}$.