

FIRST NATIONS UNIVERSITY
DEPARTMENT OF SCIENCE
MATH110-S01-S02 200930 Quiz 0

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 calculator of the type mentioned in the course outline is allowed; no other aids allowed.

(10) 1. For the function $f(x) = 2x^2 - 3$, evaluate the difference quotient

$$\frac{f(a+h) - f(a)}{a+h-a}$$

- (10) 2. The relationship between the Celsius (C) and Fahrenheit (F) temperature scales is given by the linear function $C = g(F)$ where

$$g(F) = \frac{5}{9}(F - 32)$$

- (a) What is the slope of the graph of g and what does it represent?
- (b) what is the C -intercept of the graph of g and what does it represent?
- (c) Consider the function $F = h(C)$ where

$$h(C) = \frac{9}{5}C + 32$$

Find the composition $h \circ g$.