Math 241 Fall 2017 Dr. Hadari
Classwork 4 Name: _____

Show all work and circle/box your final answer. All answers must be simplified unless stated otherwise. If you finish early, you may leave with my approval.

1. (*0 points*) Using the limit definition of the derivative, find the equation of the line tangent to the curve $f(x) = x^2 + x + 5$ at $x = 2$

2. (*0 points*) Find the derivative of the following functions: (You do not need to simplify)

(a) $f(x) = \dfrac{4x - 2}{2x^2}$

(b) $f(x) = (2x + 3)(4x + 5)^7$

(c) $f(x) = \sqrt{\sin(2x)}$