

Math 191-DX01  
Assignment 1

Deadline: Wed Sept 16, 2:30pm Pacific Time  
Submit on D2L or email HowardL@camosun.ca

Number of Questions: 2  
Total Marks: 7

Show all your work for full marks.

You MAY use the course website (notes, videos etc)

You may NOT copy from others (classmates, tutors, Chegg etc)

Submit jpg or pdf files

Feel free to handwrite your solutions and take photos of your work

Covers Sections 23.1 and 23.2

1. [3 marks] Evaluate the following limit:

$$\lim_{x \rightarrow -9} \frac{x^2 - 81}{3x + 27}$$

2. [4 marks] Find the slope of the tangent line to  $y = 8x^2 - 3x$  using the limit definition.