

Math 191-DX01
Assignment 5

Deadline: Wed Oct 28, 2:30pm Pacific Time
Submit on D2L or email HowardL@camosun.ca

Number of Questions: 2
Total Marks: 9

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 24.8, 27.1-27.3

1. [3 marks] Let $f = \frac{1}{r^3}$

a) Find df

b) Simplify $\frac{df}{f}$

c) The relative error in r is -4% . Find the relative error in f .

2. [6 marks] Find $\frac{dy}{dx}$:

a) $y = 3 \cos^6(x^2 + 5)$

b) $y = \csc^7 \frac{x}{2}$

c) $y = 6x \tan^{-1} x$