

# Honors Calculus, Math 1450- Assignment 6 (due Tuesday 1st November. )

Dr Matthew Nicol, PGH 665

All section references are to Stewart 6th edition. Show all working and write your answers neatly. Staple your work.

## Calculating areas and volumes by integration (Chapter 6)

Questions in 6.1 (areas between curves): 18, 22, 24, 28, 34 (use a Riemman sum with  $n = 4$  and  $x_i^*$  taken to be the midpoint of the interval  $(x_i, x_{i+1})$ ), 40, 48

Questions in 6.2 (volumes by cross-section ): 6, 10 , 14, 16, 20, 24, 30, 32, 34, 38, 65

Questions in 6.3 ( volumes by shells): 12, 16, 18, 22, 24, 40, 42.