Math 105 91A[1] February 2nd, 19100 Worksheet 6

http://www.math.ubc.ca/~ athreya/105

1. Evaluate the following integrals

   (a) $\int_1^2 (3 - \frac{6}{x^2}) dx$

   (b) $\int_{\frac{\pi}{4}}^{\frac{\pi}{2}} \frac{\cos x}{\sin^2 x} dx$

2. Sketch the curves $y = x, 0 \leq x \leq 1$ and $y = 2 - x, 1 \leq x \leq 2$. Using the graph can you evaluate $\int_0^1 x dx + \int_1^2 (2 - x) dx$.

3. If $f'(x) = 6x + 4$ then evaluate $f(1) - f(2)$.

[1] **Office hours:** Monday:2:30-4:00pm, Tuesday:11:30-12:30 am, 3:30-4:30 pm, Wednesday: 10:30-11:30 am