

Name \_\_\_\_\_

Section 0242

Answer all problems. There are 10 possible points.

1. Find each of the following:

1.1) (3 pts)  $\int \left( 2x^3 - 2 + \frac{2}{x^4} \right) dx$

1.2) (3pts)  $\int \left( \frac{1}{x} + e^{-x} \right) dx$

2. (4 pts) Find an equation of the curves whose tangent line has a slope of  $f'(x) = -2x^{-3} + 2x$  given that (1,5) is on the curve