

Instructions: *Include all relevant work to get full credit. Write your solutions using proper notations. Encircle your final answers.*

Quiz #17

1. Evaluate the following definite integrals:

a. $\int_0^2 \left(\frac{4}{5}x^3 - \frac{3}{4}x^2 + \frac{2}{5}x + 3 \right) dx$ [3]

b. $\int_1^4 \frac{10 + 5x^2}{2\sqrt{x}} dx$ [3]

c. $\int_0^{\pi/4} (1 + \tan \theta)^3 \sec^2 \theta d\theta$ [4]