Name: _____ **Quiz 4**

Math 151 Calculus I – Crawford **09 May 2017**

Books, notes (in any form), and calculators are not allowed. *Show all your work.* Good Luck!

1. (4 pts) Evaluate the following integral.

$$\int \cos^5 x \, \sin x \, dx$$

2. (5 pts) Evaluate the following integral. ***Simplify your answer***.

$$\int_0^2 \frac{3x}{\sqrt{x^2+4}} \, dx$$

3. (6 pts) Given the graphs of $y = x^2$ and $y = 4x - x^2$ below,

(a). Shade the region enclosed by the two curves.

(b). Find the area of the region enclosed by the two curves.