

Name: \_\_\_\_\_  
MAT 296

Quiz 1: *u*-Sub  
Fall 2017

**Problem 1:** Perform the following integration:

$$\int \frac{e^{x^{2/3}}}{\sqrt[3]{x}} dx$$

**Problem 2:** Integrate the following:

(a)  $\int \sin 2x dx$

(e)  $\int (5x - 7)^{10} dx$

(b)  $\int e^{\frac{5}{3}x} dx$

(f)  $\int \sqrt[5]{(7x + 8)^6} dx$

(c)  $\int \sqrt{7x + 1} dx$

(g)  $\int \cos(\sqrt[9]{\pi x}) dx$

(d)  $\int \frac{3}{1 - 2x} dx$

(h)  $\int \pi^5 e^{15/7} dx$