

**MATH-166**  
**Calculus II**

**Name:** \_\_\_\_\_

Carefully observe each of the integrals and evaluate them using whatever method you feel is appropriate, you may assume  $v$  not a function of  $x$ :

1.  $\int (x + 2)(x + 1)^{1/4} dx$

2.  $\int \frac{\sec^2(\sqrt{x})}{\sqrt{x}} dx$

3.  $\int \sec(x) \tan(x)(\sec(x) - 1) dx$

4.  $\int e^{14x-7} dx$

5.  $\int_0^{\pi/2} \cos^3(x) \sin(x) dx$

6.  $\int \frac{dx}{(1+\sqrt{x})^3}$

7.  $\int e^{-v^2} dx$