

Grima Mat 212

Chapter 5 extra practice test

#1-4: Find the antiderivative, be sure to include "+ C" in your answer.

1)  $\int 10x dx$

2)  $\int (15x^4 + 9x^2 - 5) dx$

3)  $\int \frac{8}{x^2} dx$

4)  $\int \frac{8}{x} dx$

#5-10: Use u-substitution to evaluate the indefinite integral.

5)  $\int 16x(8x^2 - 1)^3 dx$

6)  $\int 18x^2 e^{6x^3} dx$

7)  $\int 18x(3x^2 + 10)^2 dx$

8)  $\int 12x^2 e^{x^3} dx$

9)  $\int \frac{5}{5x-7} dx$

10)  $\frac{12}{3x-1} dx$

#11 has been deleted.

#12 – 15: Use the Fundamental Theorem of Calculus to evaluate the definite integral.

12)  $\int_1^3 4x dx$

13)  $\int_0^4 12x(x^2 + 1)^2 dx$

14)  $\int_1^{e^2} \frac{3}{x} dx$

15)  $\int_1^2 9(3x + 1)^2 dx$