

Grima Mat 212

Chapter 5 practice test with hypothetical point values

#1-4: Find the antiderivative, be sure to include "+ C" in your answer. (7 points each)

1) $\int 8x dx$

1 _____

2) $\int (6x^2 + 2x - 5) dx$

2 _____

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

3 _____

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

4 _____

#5-10: Use u-substitution to evaluate the indefinite integral. (7 points each)

$$5) \int 6x(3x^2 + 4)^3 dx$$

5 _____

$$6) \int 8xe^{4x^2} dx$$

6 _____

$$7) \int 36x(6x^2 + 5)^2 dx$$

7 _____

$$8) \int 18x^2 e^{3x^3} dx$$

8 _____

$$9) \int \frac{5}{5x-1} dx$$

9 _____

$$10) \int \frac{15}{5x-1} dx$$

10 _____

#11 – 15: Use the Fundamental Theorem of Calculus to evaluate the definite integral. (7 points each)

11) $\int_0^2 6x dx$

11 _____

12) $\int_0^1 6x(x^2 - 3)^2 dx$

12 _____

13) $\int_1^{e^9} \frac{1}{x} dx$ (worth 8 points)

13 _____

14) $\int_0^1 15(5x + 2)^2 dx$ (worth 8 points)

14 _____