

Integrate each of the following.

1.  $\int x^3 dx =$  \_\_\_\_\_

2.  $\int 6x^3 dx =$  \_\_\_\_\_

3.  $\int 5 dx =$  \_\_\_\_\_

4.  $\int (x^2 + 6x - 1) dx =$  \_\_\_\_\_

5.  $\int (2x^2 + 3x - 5) dx =$  \_\_\_\_\_

6.  $\int 6\sqrt{x} dx =$  \_\_\_\_\_

7.  $\int \sqrt[3]{x} dx =$  \_\_\_\_\_

8.  $\int (x - 2)^2 dx =$  \_\_\_\_\_

9.  $\int -3x(x^2 + x - 6) dx =$  \_\_\_\_\_

10.  $\int (x + 2)^3 dx =$  \_\_\_\_\_

Calculus Worksheet #4 Unit 3 page 2

Evaluate each of the following. Show all of your work neatly organized.

11.  $\int_2^5 x^2 dx = \underline{\hspace{2cm}}$

12.  $\int_1^3 4x^3 dx = \underline{\hspace{2cm}}$

13.  $\int_1^3 (3x + 1) dx = \underline{\hspace{2cm}}$

14.  $\int_1^8 \sqrt[3]{x} dx = \underline{\hspace{2cm}}$

15.  $\int_1^3 (x^2 - 4x + 1) dx = \underline{\hspace{2cm}}$