

Integrate each of the following.

1. $\int x^4 dx =$ _____

2. $\int 4x^2 dx =$ _____

3. $\int 2 dx =$ _____

4. $\int (x^2 - 2x + 3) dx =$ _____

5. $\int (5x^2 + 7x - 1) dx =$ _____

6. $\int 2\sqrt{x} dx =$ _____

7. $\int \sqrt[4]{x} dx =$ _____

8. $\int (x + 3)^2 dx =$ _____

9. $\int -2x(x^2 - 2x + 1) dx =$ _____

10. $\int (2x - 1)^3 dx =$ _____

Calculus Worksheet #3 Unit 3 page 2

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

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

12. $\int_0^2 5x^4 dx = \underline{\hspace{2cm}}$

13. $\int_3^5 (2x - 1) dx = \underline{\hspace{2cm}}$

14. $\int_4^9 \sqrt{x} dx = \underline{\hspace{2cm}}$

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