

# MTH 1125 2pm Class - Test #4

FALL 2018

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Name \_\_\_\_\_

Show CLEARLY how you arrive at your answers!

1. **Compute:**  $\int (16x^3 + 12x^2 + 8x + 4 + 2\sqrt{x}) dx =$

2. **Compute:**  $\int (9x^2 + 12x)^5 (3x + 2) dx =$

3. **Compute:**  $\int (5 \cos(x) + 6 \csc^2(x)) dx =$

4. **Compute:**  $\int \sin(6x^2 + 18x + 4) (2x + 3) dx =$

5. **Compute:**  $\int_{-1}^1 (6x^2 + 6x + 4) dx =$

6. **Compute:**  $\int_0^1 (4x^2 + 2)^3 x dx =$

7. **Compute:**  $\frac{d}{dx} [\ln(\sqrt{x})] =$

8. **Compute:**  $\int \frac{\sec^2(3x)}{\tan(3x)} dx =$