

Calc 2 Answer sheet

September 19, 2024

Just showing the indefinite integrals since the final step is trivial.

$$1. \int x^2 dx = \frac{x^3}{3} + C$$

$$2. \int 3x^2 dx = x^3 + C$$

$$3. \int x dx = \frac{x^2}{2} + C$$

$$4. \int 3x^2 + 2x - 7 dx = x^3 + x^2 - 7x + C$$

Things to remember:

- Insist on including the constant C on the first example to show how they cancel out, then ignore it
- When computing the final definite integral, remember that continuous functions do not have density at discrete points. Important intuition for later!