

Show all work and circle/box your final answer. All answers must be simplified unless stated otherwise.

1. Evaluate the following indefinite integrals:

(a) $\int \left(\frac{9}{x} - 3e^{4x} \right) dx$

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

(c) $\int \left(\sqrt{x} + \frac{1}{x^2} \right) dx$

(d) $\int \left(\frac{2x^5 - x + 3}{x^2} \right) dx$

(e) $\int \frac{x^2 + 1}{(x^3 + 3x)^2} dx$

(f) $\int \frac{9x^2 dx}{\sqrt{1 - x^3}}$