

Name _____

1. (6 points) Evaluate the following indefinite integrals.

(a) $\int \left(10x^4 + \frac{2}{x} - 3 \sin x - 15 \right) dx$

(b) $\int \frac{2x^3 + x^2 - 3x + 4}{x^2} dx$

(c) $\int \frac{\tan x \cos x}{\sin x - \sin^3 x} dx$

2. (4 points) Find a function f such that $f''(x) = 12e^{2x}$ and such that $f(0) = 7$ and $f'(0) = 11$.