

Full Name:

ID:

Section:

Question 1 Evaluate the following integrals:

a) $\int \cos(\ln(2x+1)) dx$

b) $\int \sin^2 x \cos(3x) dx$

$$c) \int \frac{1}{\sin x + \cos x} dx$$

$$d) \int \cot^4 x dx$$

$$e) \int \sqrt{\frac{1}{x} - 1} dx$$

$$f) \int \frac{\sqrt{\sqrt{x} - 1}}{x} dx$$