

1. Evaluate $\int (\sqrt{x} + e^x - \sec x \tan x) dx$

2. Evaluate.

a) $\int_{\pi/6}^{\pi/3} (\sec^2 x - \csc^2 x) dx$

b) $\int_1^4 \frac{x^2 - 2x + 1}{\sqrt{x}} dx$