

1. $\int_0^{\frac{\pi}{2}} \frac{\sin x - \cos x}{1 + \sin x \cos x} dx$ is equal to:

(a) π

(b) $Zero(0)$

(c) $\int_0^{\frac{\pi}{2}} \frac{2 \sin x}{1 + \sin x \cos x} dx$

(d) $\frac{\pi^2}{4}$

2. Find : $\int \frac{e^{4x} - 1}{e^{4x} + 1} dx$

3. Evaluate: $\int_2^{\frac{2-x}{z+x}} -2 \sqrt{\frac{2-x}{z+x}} dx$

4. Find: $\int \frac{1}{x[(\log x)^2 - 3 \log x - 4]} dx$

5. Find: $\int x^2 \cdot \sin^{-1}(x^{\frac{3}{2}}) dx$