

تمارين إضافية لمادة التفاضل والتكامل :-

$$1 - \int_1^3 (\sqrt{x} + x^{\frac{3}{2}} + 1) dx$$

$$2 - \int_0^{\pi} (\sin x + \cos x) dx$$

$$3 - \int_0^{\pi} (\sin 2x + \cos 3x) dx$$

$$4 - \int_0^{\pi} x^2 + \cos 2x \cdot dx$$

$$1 - \int \tan^{-1} x \cdot dx$$

$$2 - \int e^x \cdot \sin x \, dx$$

$$3 - \int x^2 \cdot \sin 3x$$

$$1 - \frac{d}{dx} (3^{\tan x})$$

$$2 - \frac{d}{dx} (e^{\sin^2 x})$$

$$3 - \frac{d}{dx} (\ln(x^2 + 5 + \sin))$$

$$4 - \frac{d}{dx} (\log_3(x^2 + \cos x + 12))$$

$$5 - \frac{d}{dx} (2^{\sin 3x} + \cos^2 5x)$$
