

**MATH 2
HOMEWORK**

Find the following:

(1)

$$\int (\pi - x^2)^{-\frac{1}{2}} dx$$

(2)

$$\int \frac{\sin x}{1 + \cos^2 x} dx$$

(3)

$$\int \frac{-1}{x\sqrt{1 - (\ln x)^2}} dx$$

(4)

$$\int \frac{e^{\tan^{-1} x}}{1 + x^2} dx$$