

**MATH 2  
HOMEWORK**

Find the following:

(1)

$$\int_0^1 \frac{1}{\sqrt{1-x^2}} dx$$

(2)

$$\int_{\frac{\pi}{4}}^{\frac{\pi}{3}} \sin x \cos x dx$$

(3)

$$\int_0^{\frac{\pi}{3}} \sec^2 x \tan x dx$$