



SECTION 7.5 INVERSE TRIG FUNCTIONS

REVIEW

$$\frac{d}{dx} [\sin^{-1} x] =$$

$$\frac{d}{dx} [\tan^{-1} x] =$$

$$\frac{d}{dx} [\sec^{-1} x] =$$



THEREFORE

$$\int \frac{1}{\sqrt{1-x^2}} dx = \sin^{-1} x + C$$

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

$$\int \frac{1}{|x|\sqrt{x^2-1}} dx = \sec^{-1} x + C$$



EXAMPLE 1

$$\int \frac{1}{\sqrt{1-x^2}} dx = \sin^{-1} x + C$$

$$\int \frac{1}{\sqrt{1-4x^2}} dx$$



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

EXAMPLE 2

$$\int \frac{1}{x^2 + 9} dx$$



- Calculaugh 55
- p. 485 # 59 – 69 odd
- Quiz tomorrow

