

INVERSE TRIG FUNCTIONS IV
AP CALCULUS

Answers

NAME _____

Evaluate the integral.

1. $\int_0^{1/6} \frac{1}{\sqrt{1-9x^2}} dx$

$$\frac{\pi}{18}$$

2. $\int_0^{\sqrt{3}/2} \frac{1}{1+4x^2} dx$

$$\frac{\pi}{6}$$

3. $\int_0^{\sqrt{3}/2} \frac{\arcsin x}{\sqrt{1-x^2}} dx$

$$\frac{\pi^2}{32}$$

4. $\int_{-1/\sqrt{2}}^0 \frac{x}{\sqrt{1-x^2}} dx$

$$\frac{\sqrt{3}}{2} - 1$$

5. $\int_{\pi/2}^{\pi} \frac{\sin x}{1+\cos^2 x} dx$

$$\frac{\pi}{4}$$