

Name_____

Date_____

Calculus Independent Study Path

Practice Unit 9 Test

Find the following indefinite integrals:

1.

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

2.

$$\int (\ln x)^2 \, dx$$

3.

$$\int \tan^2 \left(\frac{\pi}{4} x \right) \, dx$$

4.

$$\int \frac{3x - 5}{\sqrt{1 - x^2}} \, dx$$

5.

$$\int \frac{x^5}{(x^2 + 4)^2} \, dx$$

6.

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