

Calculus BC CH. 5 Review WS Name _____

1) $\frac{d}{dx}(8^{3x^4} + e^{\sec x}) =$

2) $\frac{d}{dx} \ln\left(\frac{x^4 \sqrt{x^3 + 1}}{2x - 5}\right)$

3) $\frac{d}{dx} \arctan(7x) =$

4) $\frac{d}{dx} \operatorname{arcsec}(5x^4) =$

5) $\frac{d}{dx} \arcsin(\sin x) =$

6) $\frac{d}{dx} x^{6x} =$

7) $\int (12^{9x} + e^{100x}) dx =$

8) $\int \frac{e^{2x}}{e^{2x} - 1} dx =$

9) $\int \left(\frac{10}{x^2 + 49} + \frac{10x}{x^2 + 49} \right) dx =$

$$10) \int (\tan 10x + \csc 11x) dx =$$

$$11) \int (\cot 12x + \sec 13x) dx =$$

$$12) \int 2x^3 \cdot 3^{-3x^4} dx$$

$$13) \int_{-\sqrt{3}}^1 \frac{1}{\sqrt{4-x^2}} dx =$$

$$14) \int_1^{\sqrt{3}} \frac{12\sqrt{3}}{x^2+3} dx =$$

$$15) \int_0^{\pi/4} \frac{\sec^2 x}{\tan x + 9} dx =$$

$$16) \int \frac{10}{x\sqrt{4x^6-1}} dx =$$

$$17) \csc(\arccos \sqrt{x}) =$$