

Name: \_\_\_\_\_

## Calculus

### Derivative Progression K: Trigonometry

Find the derivative of each function (  $\frac{dy}{dx}$  )

1)  $y = \sin x$

9)  $y = \tan x^5$

2)  $y = \cos x$

10)  $y = \sec^5 x$

3)  $y = \tan x$

11)  $y = \csc^3 x^4$

4)  $y = \csc x$

12)  $y = \sin x \cos x$

5)  $y = \sec x$

13)  $y = \frac{\sin x}{\cos x}$

6)  $y = \cot x$

14)  $y = 3 \sec x^2 \tan x^2$

7)  $y = 5 \sin x$

15)  $y = \cot(x^3 + 3x) \tan(x^3 + 3x)$

8)  $y = \cos 5x$

16)  $y = \sqrt{\sin(e^{x^2})}$