

**Calculus Worksheet #2 Unit 6 page 1** \_\_\_\_\_

Find  $dy/dx$  for each of the following.

1.  $y = \tan(3x + 1)$

2.  $y = \tan(1 - x^2)$

3.  $y = \tan(x^3)$

4.  $y = \tan^3(x)$

5.  $y = \tan^5(2x - 3)$

6.  $y = \sqrt{\tan(x)}$

7.  $y = \cot(5x)$

8.  $y = \cot(x^2 + 1)$

9.  $y = \cot(3 - 2x)$

10.  $y = \cot^3(4x + 3)$

11.  $y = \sec(2x)$

12.  $y = \sec(3x^2 + 1)$

## Calculus Worksheet #2 Unit 6 page 2

Find  $dy/dx$  for each of the following.

13.  $y = \sec(5 - 7x)$

14.  $y = \sec^4(x)$

15.  $y = \sec^7(x^2 + 9)$

16.  $y = \sqrt{\sec(3x + 1)}$

17.  $y = \csc(x + 3)$

18.  $y = \csc(x^5)$

19.  $y = \csc^5(2x - 3)$

20.  $y = \sqrt{\csc(1 - 4x)}$