

Math 180
Winter, 2009

Name _____

Homework #6
Due Tuesday, January 20
No late papers accepted!

Differentiate the following.

1. $y = \frac{\cos 3x}{\sin 5x}$

2. $y = \sqrt{\cos \sqrt{x}}$

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

4. If $f(x) = \sin 2x - \cos 2x$ for $[0, 2\pi]$, find the x -coordinates of all points on the graph of f at which the tangent line is horizontal.