
Math 1571

Test 2 (half)

I. Solve for $\frac{dy}{dx}$ in each of the following:

1. $y = \sqrt{\sec(2x)}$

2. $y = \cos(\tan(x))$

3. $x \sin(y) = y - 1$

4. $y = \sqrt{\frac{x-1}{x-2}}$

5. $y = \frac{\sin(2x)}{x}$

6. If $y = (1 + 4x^2)^3$

7. $y = \sin(x) \cos(2x)$

8. $yx - y^2 = 6$

II.Simplify Find y'' and simplify.

9. $x^2 - y^2 = 1$

10. If $y = 2 \cos(x) + \sin^2(x)$