

Math 230
Derivatives Worksheet
Spring 2003

Show all your work on another piece of paper.

Part I: Do the derivatives:

1. $f(x) = (4x - 2)(3x + 1)^4$

2. $m(t) = 5(\sqrt{t} - 1)^4(\sqrt[3]{t} - 2)^2$

3. $y = \frac{\tan(mx)}{x}$

4. $p(x) = \frac{1}{\cos(x - \cos x)}$

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

6. $f(x) = \sin(\sin(\sin x))$

Part 2: Find y' .

1. $x^2 + 5y^2 = 36$

2. $\sqrt{xy} = 1 + x^2y$

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

4. $\sin x + \cos y = \sin x \cos y$