

Quiz-Implicit Differentiation 2017 V2.doc Name: _____

Use implicit differentiation to find the derivative of each equation below. Simplify answers as much as possible and leave no negative exponents.

1) $y^5 + 4x^2y^2 + 5x^4 = 12$

2) $2\sqrt{y+x} = 3x^2$

3) $(4y^2 - 1)^3 = (3x^2 - x)^4$

4) Find the equation of the tangent line to the implicit function $x^3 - 8xy + y^3 = 0$ at the point (4,4).

