

Calculus AB

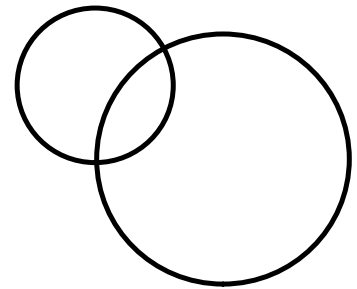
2-5
(Day 2)

Implicit Differentiation

Find $\frac{d^2y}{dx^2}$ in terms of x and y . (pg 142)

46) $x^2y^2 - 2x = 3$

Orthogonal -



Use a graphing utility to sketch the intersecting graphs of the equations and show that they are orthogonal. [Two graphs are *orthogonal* if at their points of intersection, their tangent lines are perpendicular.]

60) $y^2 = x^3$
 $2x^2 + 3y^2 = 5$

Differentiate (a) with respect to x and (b) with respect to t .

66) $x^2 - 3xy^2 + y^3 = 10$

Assignment:

Pg. 142

29 - 39 odd,
45-49 odd,
59, 61, 65, 67