**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**November 9th, 2011**

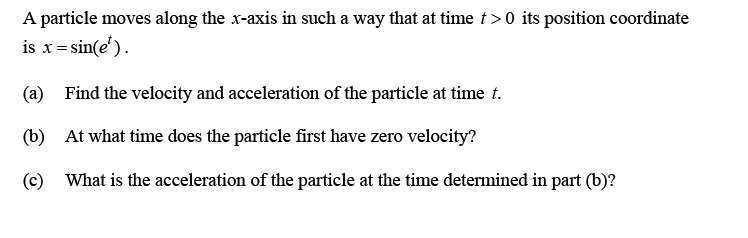
**AP Calculus 1, Mrs. Sulkes and Mrs. Duty**

**Review for Test #2, Q2**

**Some AP Practice Problems**

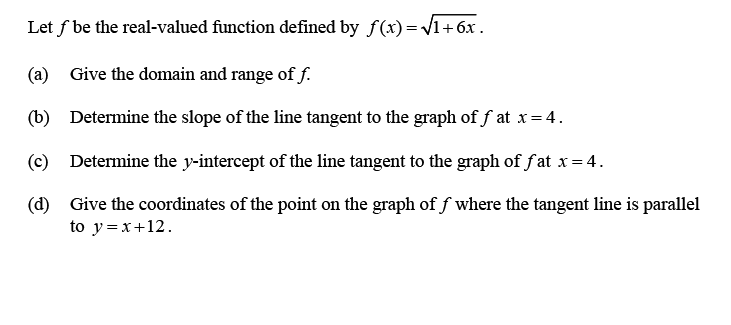
**Implicit, Motion, Logarithmic Diff., Derivatives of Inverses**

1.

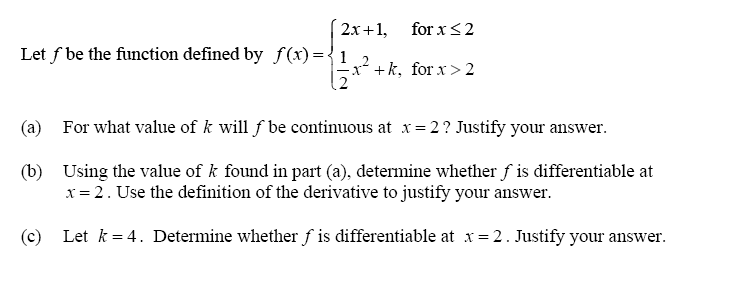


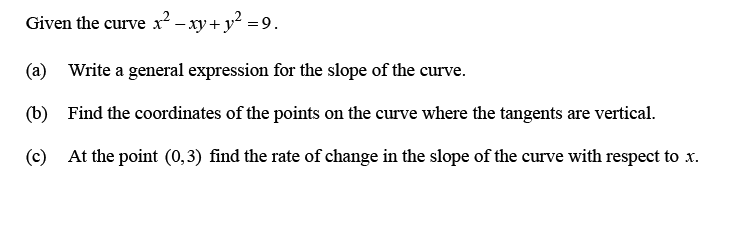
2. Let . Calculate  and  in terms of  and .

3.



4.





5.

6. Find the first derivative of each of the following functions.

a. 

b. 

7. Given , if , find .

8. Find the equation of the tangent line to the curve  at the point

(, 0).

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9. Use logarithmic differentiation to find  of with respect to .