

Name: \_\_\_\_\_  
AP Calculus: Derivatives of Sine and Cosine

Date: \_\_\_\_\_  
Ms. Loughran

Answer each of the following questions using the formal definition of a derivative.

1. If  $f(x) = \sin x$ , find  $f'(x)$ .

2. If  $f(x) = \cos x$ , find  $f'(x)$ .

**Therefore:**  $\frac{d}{dx}[\sin x] =$   
 $\frac{d}{dx}[\cos x] =$

