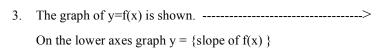
1. Define f'(x) =(the definition)

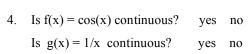
(2)

2. C(b) is the cost (dollars) to make b bicycles. Explain the meaning (using complete sentences) of C(210) = 17,500 and C'(210) = 52.

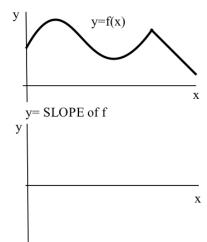
(3)



(3)



(3) Is h(x) = 2 + |x| continuous? yes no



5. (a)
$$f(x) = x^2 + 3x + 2$$
. Evaluate and simplify (no limit)
$$\frac{f(2+a) - f(2)}{a} = \underline{\hspace{1cm}}$$

(3)

What is the equation of the line tangent to the graph of

$$f(x) = 2x^2 - 3x + 1$$
 at the point (2, 3)? $y =$ _____

(3)

 $f(x) = Ax^2 + Bx + C$. At what value of x is f'(x) = 0. x = $g(x) = 2x + \sin(x)$. At what value of x is g'(x) = 0. x =_____

(4)