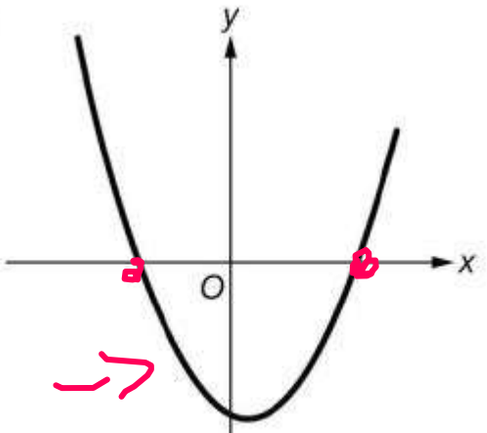
Graph of f'

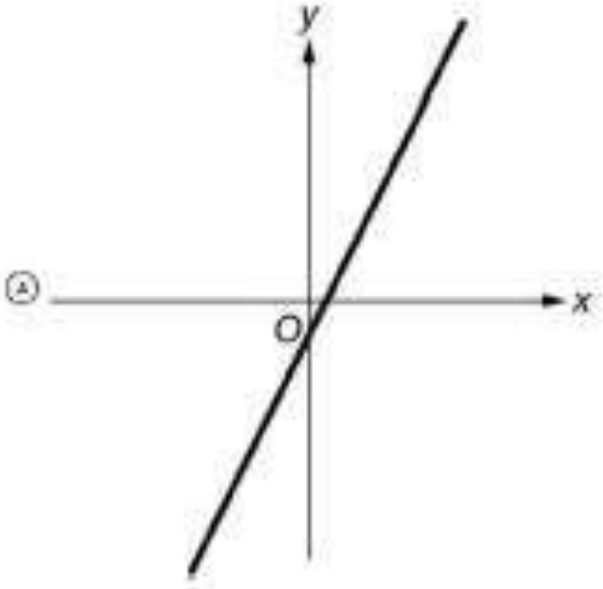
The graph of f', the derivative of the function f, is shown above. Which of the following could be the graph of f?

1.

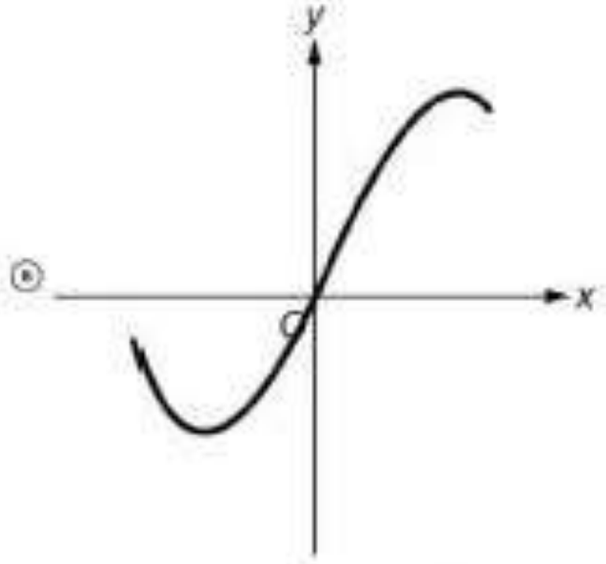


Decreasing

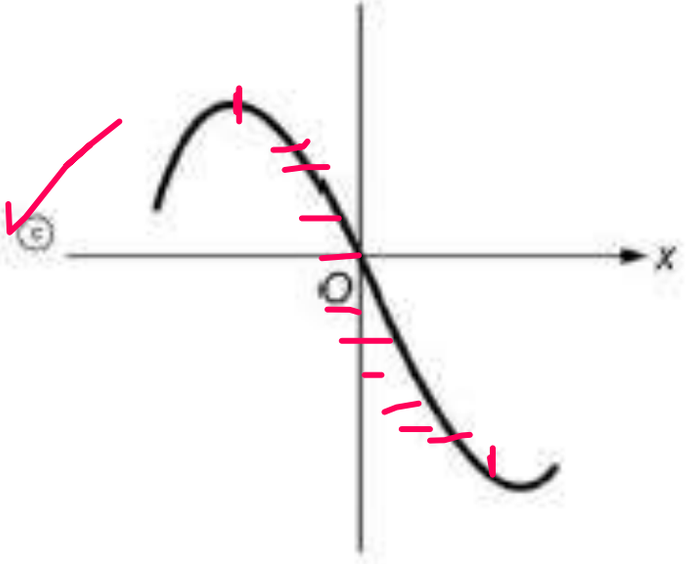
(A)



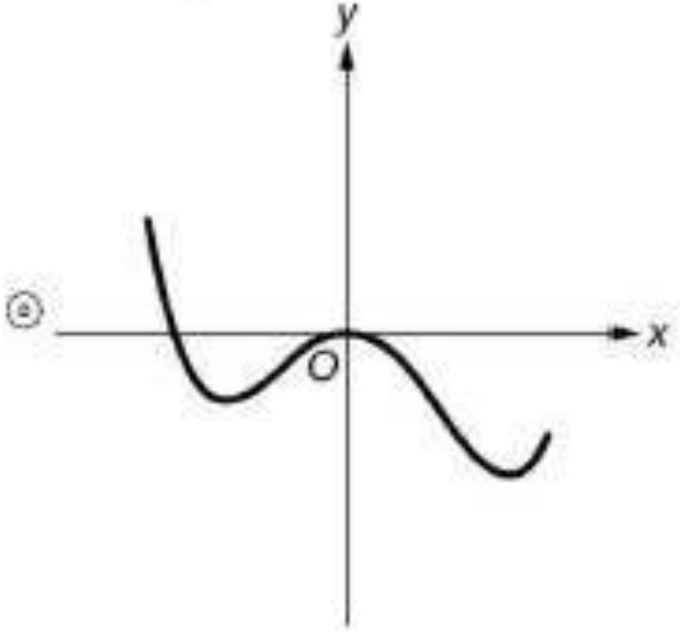
(B)



(C)

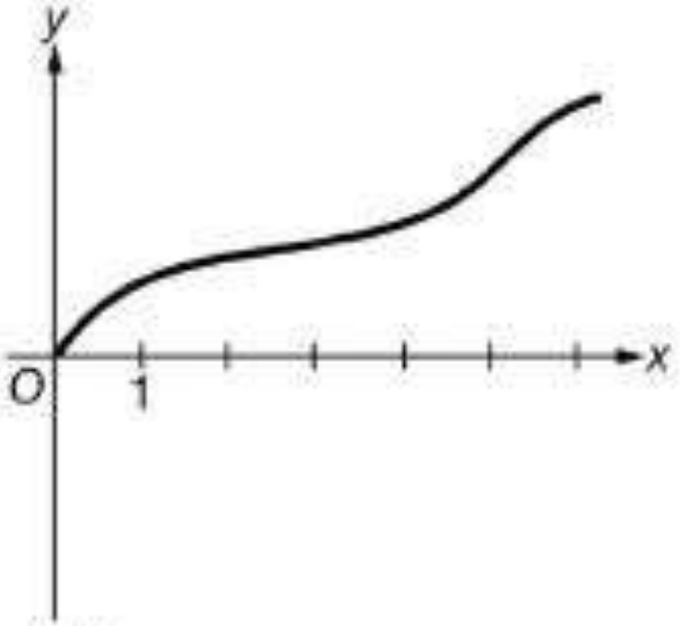


(D)

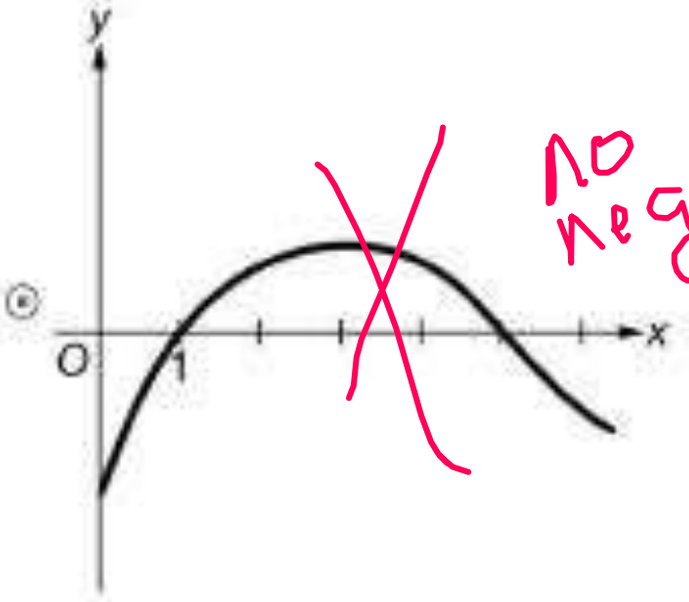


2. The function f is differentiable and increasing on the interval $0 \le x \le 6$, and the graph of f has exactly two points of inflection on this interval. Which of the following could be the graph of f', the derivative of f ?

(A)

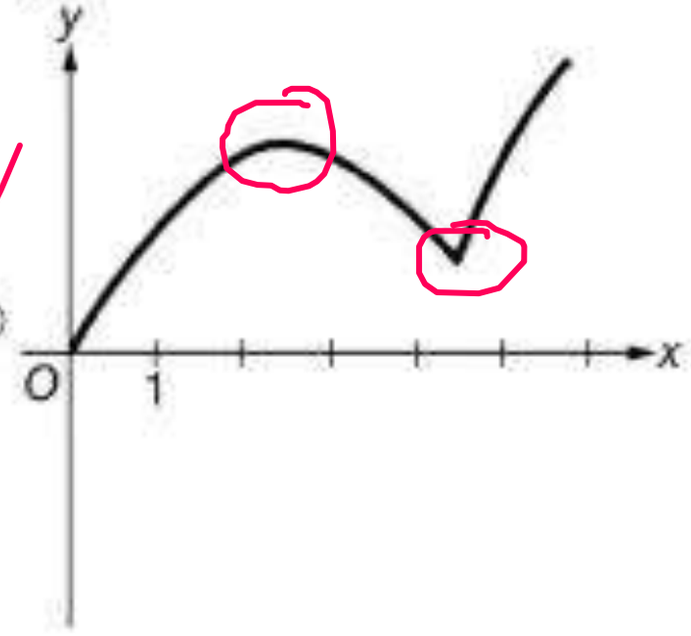


(B)

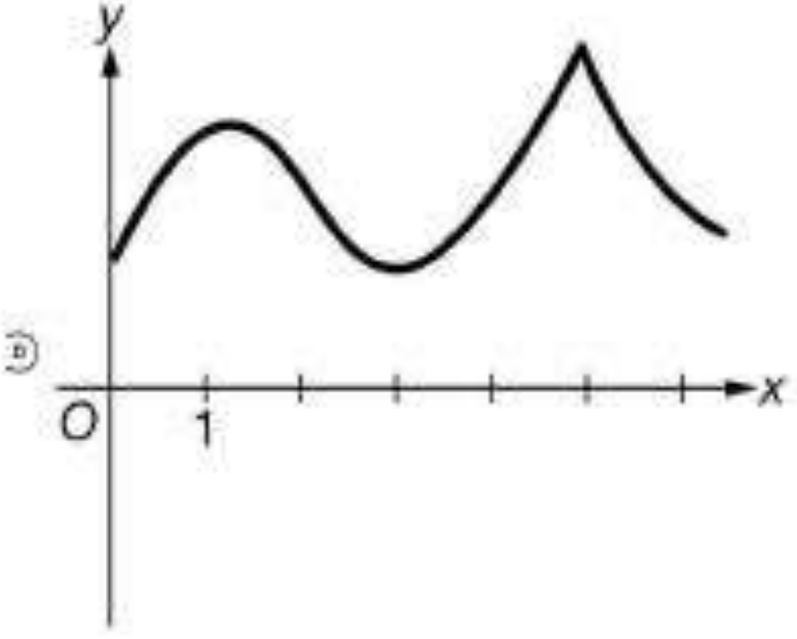


No neg.

(C)



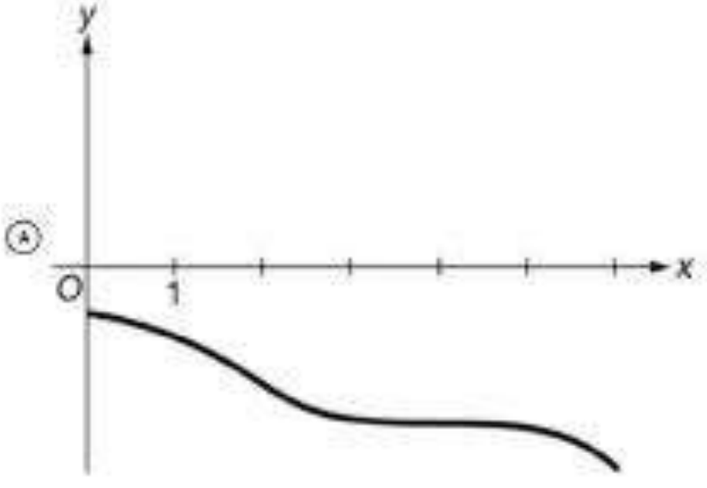
(D)



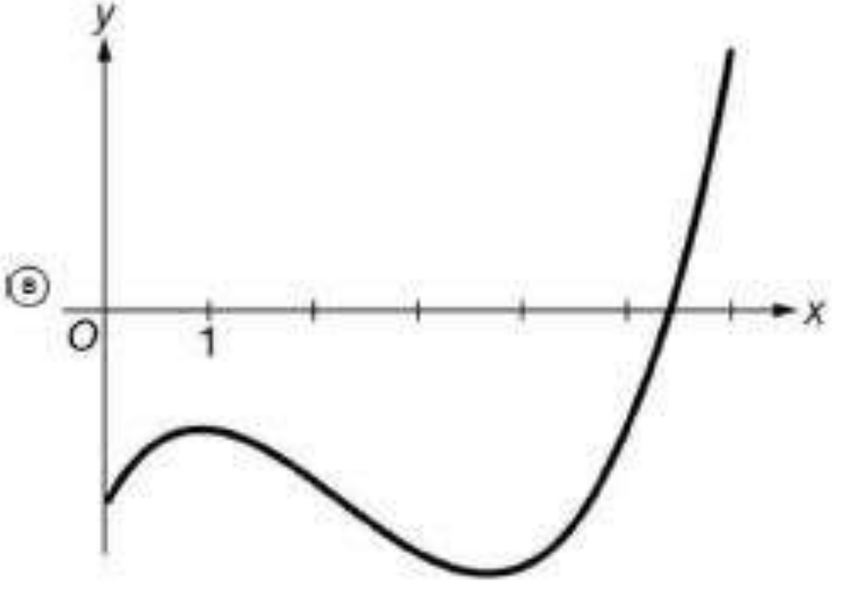
POI
Concave up to concave down or vice versa

3. The function f is differentiable and decreasing on the interval $0 \leq x \leq 6$, and the graph of f has exactly two points of inflection on this interval. Which of the following could be the graph of f', the derivative of f ?

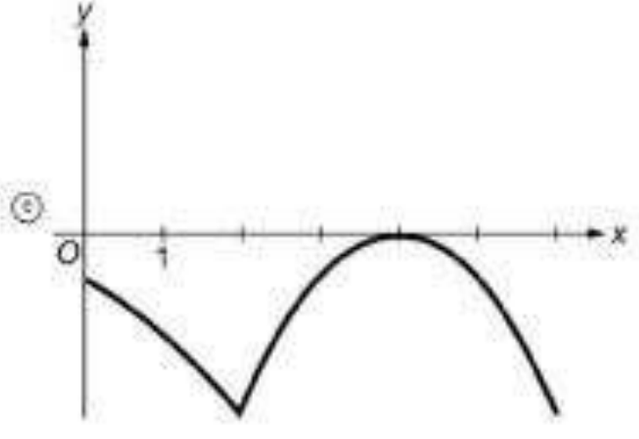
(A)



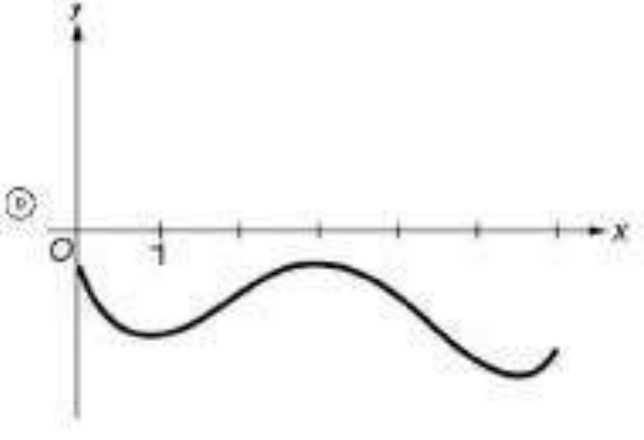
(B)



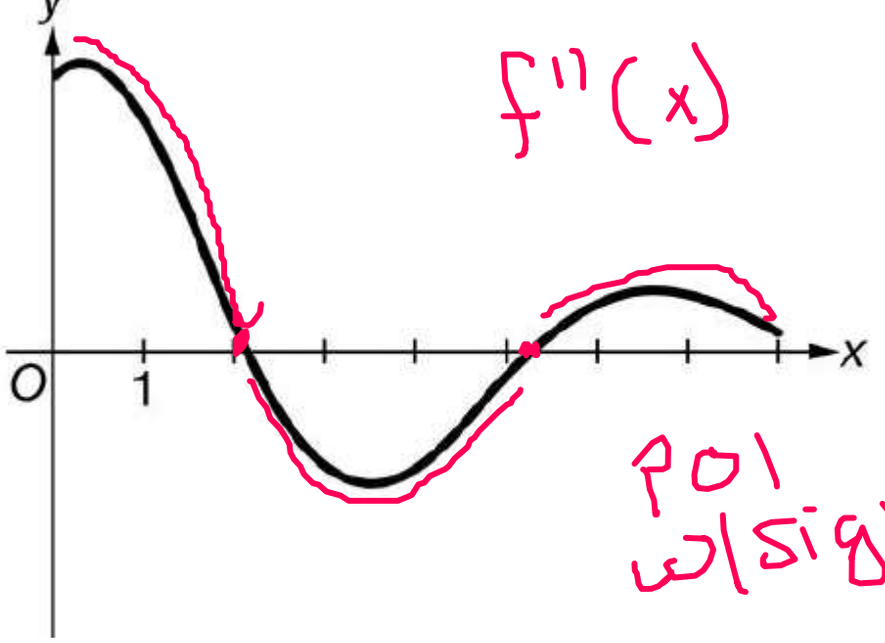
(C)



(D)



5.



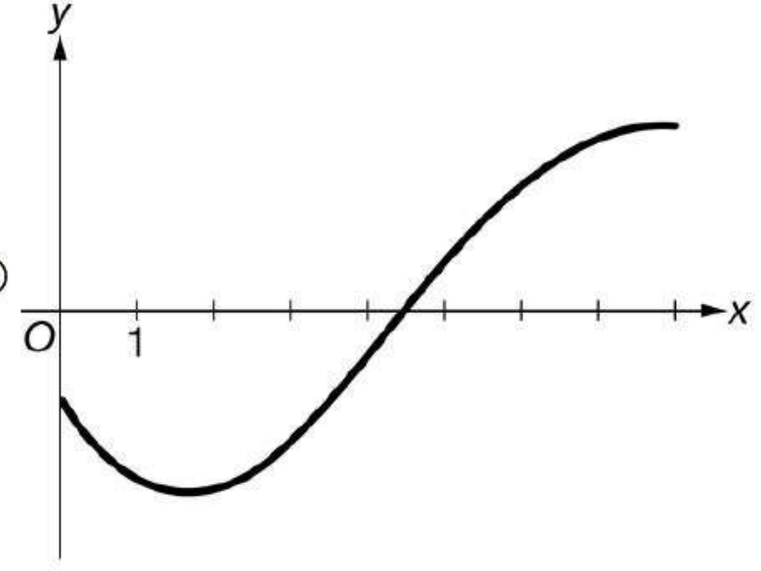
f''(x)

POI w/ sign change

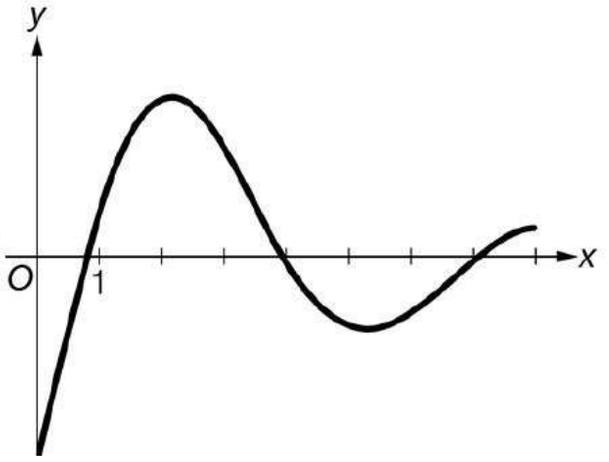
Graph of f''

The graph of f'', the second derivative of the function f, is shown above on the interval $0 \le x \le 8$. Which of the following could be the graph of f ?

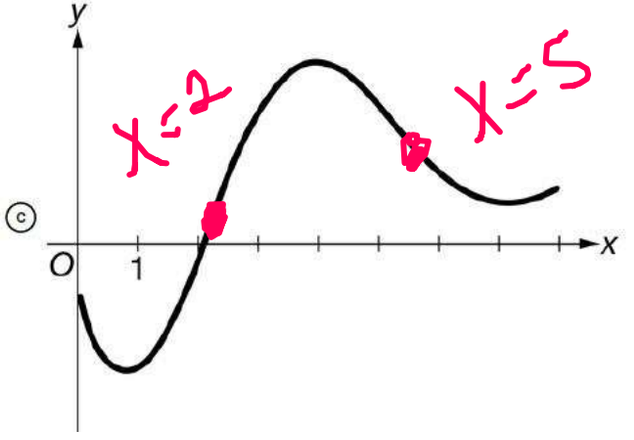
(A)



(B)



(C)



x=2

x=5

(D)