I wish I was as cool as my math teacher.

A. Yes  
B. No

Which graph is the derivative of the function below?

A freight train chugs along a straight track. The distance it has traveled after \( x \) hours is given by a function \( f(x) \). An engineer is walking along the top of the box cars at the rate of 3 mi/hr in the same direction as the train is moving. The speed of the man relative to the ground is

A. \( f(x) + 3 \)  
B. \( f(x) - 3 \)  
C. \( f'(x) - 3 \)  
D. \( f'(x) + 3 \)

The graph of \( f(x) \) is shown. Which of the following statements are true:

i) \( f(x) \) is positive  
ii) \( f(x) \) is increasing  
iii) \( f'(x) \) is positive  
iv) \( f'(x) \) is increasing  
v) \( f''(x) \) is positive

A. i, ii, and iii only  
B. i, iii, and v only  
C. ii, iii, iv, and v only  
D. All are true  
E. The correct combination is not listed

In the graph, the first derivative at points a, b, and c respectively is:

A. “I don’t know is on third base.”  
B. \( -, 0, + \)  
C. \( -, 0, - \)  
D. \( +, 0, + \)  
E. \( +, +, - \)  
F. \( -, -, + \)  
G. \( -, -, + \)

In the graph, the second derivative at points a, b, and c respectively is:

A. \( +, 0, - \)  
B. \( -, 0, + \)  
C. \( -, 0, - \)  
D. \( +, 0, + \)  
E. \( +, +, - \)  
F. \( -, -, + \)