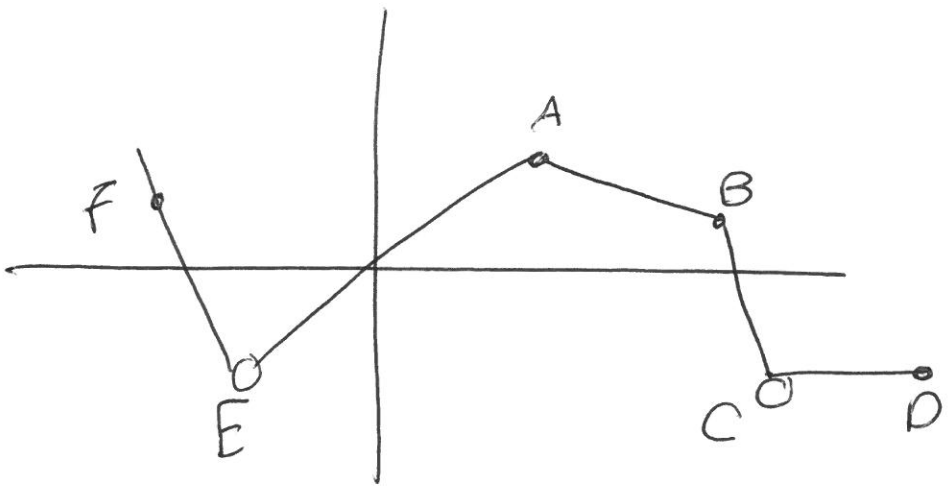
Topics Quiz



f graph

Point	Is it continuous?	Does limit exist?	Is it differentiable?	Name the slope (dne, pos, neg)
A				
B				
C				
D				
E				
F				

Find a so $f(x)$ is continuous

1) $f(x) = \begin{cases} x^2+4 & x<1 \\ ax+2 & x\geq 1 \end{cases}$

2) $f(x) = \begin{cases} 2ax+3 & x<2 \\ x^3+2 & x\geq 2 \end{cases}$

Part 2

① $\int_0^6 x^2 e^{x^3} dx$

let $u = x^3$

switch all to x

Part 3

$$f(x) = \int_0^x x^3 + x^2 \, dx$$

$f'(x) =$

$f''(x) =$

critical points =

points of inflection →

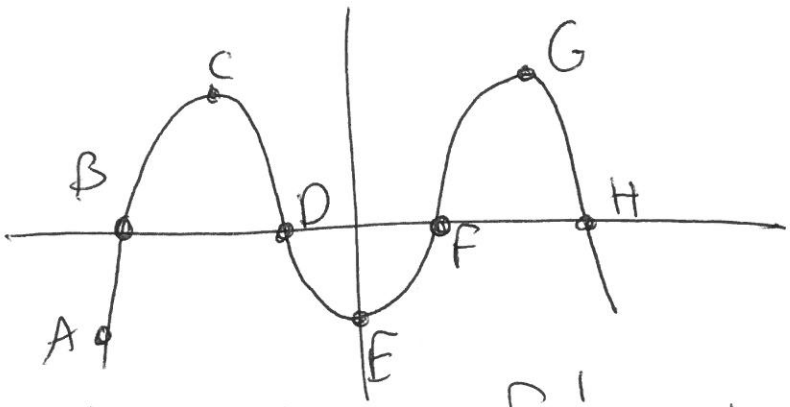
Part 3

1) $f(x) = x^2$ $[0, 4]$

Average rate of Change →

Average Value →

Part 4



Point	f'	f''	f' rel max?	rel min?	inflection pt?
A					
B					
C					
D					
E					
F					
G					