Quiz 2.1

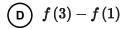
Name

1. Let f be the function defined by $f(x) = 2x^3 - x$. Which of the following expressions is the average rate of change of f on the interval [1, 3]?





C $\frac{f(3)-f(1)}{3-1}$



2.	\boldsymbol{x}	-3	-1	1	3
	$g\left(x ight)$	12	0	1	-4

Selected values of a function g are shown in the table above. What is the average rate of change of g over the interval [-3,3]?

(A)
$$\frac{3-(-3)}{(-4)-12}$$

(B) $\frac{(-4)-12}{3-(-3)}$
(C) $\frac{12+(-4)}{2}$

D
$$\frac{12+0+1+(-4)}{4}$$

3. Let f be the function defined by $f(x) = 2 \sin x + \cos x$. The average rate of change of f over the interval [0, b] is 0.05, where b > 0. Which of the following is an equation that could be used to find the value of b?



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(A)
$$f(b) = 0.05$$

(B) $f(b) - f(0) = 0.05$
(C) $\frac{f(b) - f(0)}{b - 0} = 0.05$
(D) $\frac{f(b) + f(0)}{2} = 0.05$