

## Quiz 2.6

Name \_\_\_\_\_

1. Let  $f$  and  $g$  be differentiable functions such that  $f'(1) = 2$  and  $g'(1) = 6$ . If  $h(x) = 5f(x) - 4g(x) + 3x^2 - 2$ , what is the value of  $h'(1)$ ?

(A)  $-10$

(B)  $-8$

(C)  $2$

(D)  $40$

2. Let  $f$  be the function given by  $f(x) = 2x^3 - 4x^2 - 5$ . What is the value of  $f'(-1)$ ?

(A)  $-14$

(B)  $6$

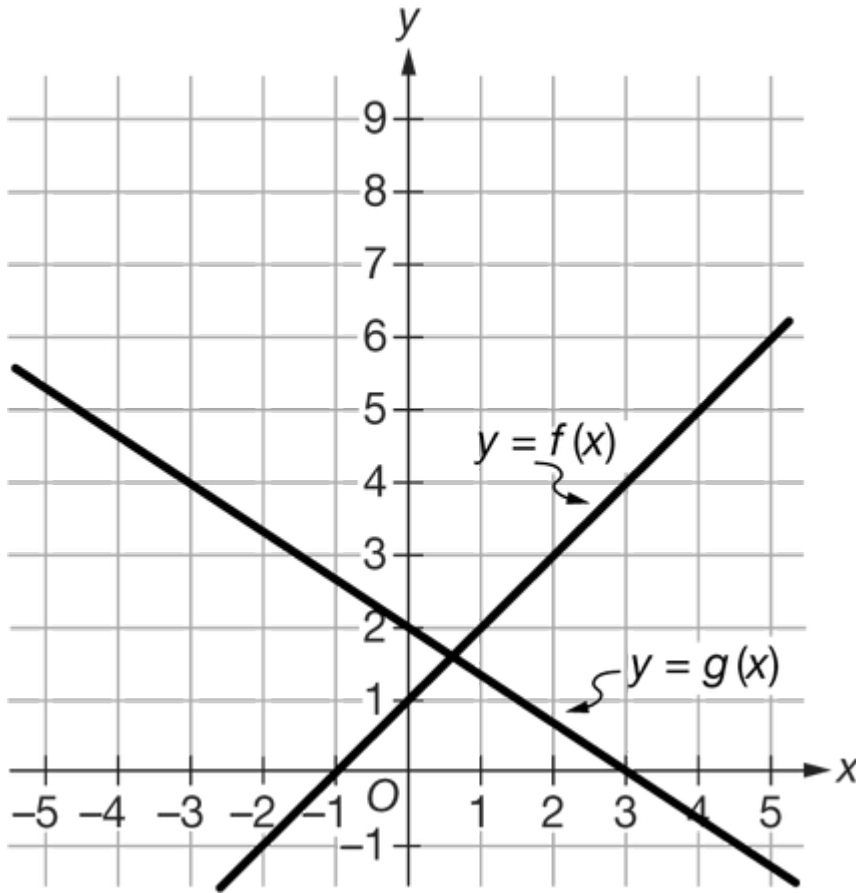
(C)  $9$

(D)  $14$



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3.



The graphs of the linear functions  $f$  and  $g$  are shown above. If  $h(x) = f(x) + g(x)$ , then  $h'(x) =$

- (A)  $\frac{5}{3}$
- (B) 0
- (C)  $\frac{1}{3}$
- (D)  $\frac{1}{3}x + 3$