

## Quiz 5.5

Name \_\_\_\_\_

1. Let  $g$  be the function given by  $g(x) = 3x^4 - 8x^3$ . At what value of  $x$  on the closed interval  $[-2, 2]$  does  $g$  have an absolute maximum?
- (A)  $-2$
- (B)  $0$
- (C)  $2$
- (D)  $\frac{8}{3}$
2. Let  $f$  be the function defined by  $f(x) = 12x - x^3$ . What is the absolute minimum value of  $f$  on the closed interval  $[0, 3]$ ?
- (A)  $-16$
- (B)  $0$
- (C)  $9$
- (D)  $16$
3. Let  $g$  be the function defined by  $g(x) = |x| + 2|1 - x|$ . What is the absolute minimum value of  $g$  on the closed interval  $[-2, 2]$ ?



**Quiz 5.5**

---

(A) 1

(B) 2

(C) 4

(D) 8