

Quiz 2.5

Name _____

1. $\lim_{h \rightarrow 0} \frac{(2+h)^3 + 2(2+h) - (2)^3 - 2(2)}{h}$ is

- (A) 6
- (B) 12
- (C) 14
- (D) nonexistent

2. $g(x) = \begin{cases} 2 - 2x & \text{for } x < 1 \\ 5x - 5 & \text{for } x \geq 1 \end{cases}$

If g is the function defined above, then $g'(1)$ is

- (A) -2
- (B) 0
- (C) 5
- (D) nonexistent

3. What is the value of $\lim_{h \rightarrow 0} \frac{(16+h)^{\frac{1}{4}} - 2}{h}$?



Quiz 2.5

(A) 0

(B) $\frac{1}{32}$

(C) $\frac{1}{8}$

(D) 1