

UNIT TEST

Evaluate the limits.

1. $\lim_{x \rightarrow 1} \ln x$

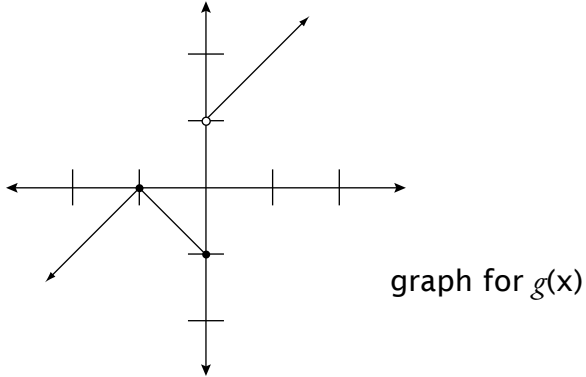
2. $\lim_{x \rightarrow 0} \frac{x^2 + 2x}{x}$

3. $\lim_{x \rightarrow 0} \frac{\sin(90^\circ - x)}{2 \cos x}$

4. $\lim_{x \rightarrow \infty} \frac{2x - 2}{3x - 3}$

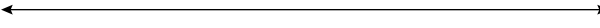
5. $\lim_{x \rightarrow -1} \frac{3x + 3}{x + 1}$

6. $\lim_{x \rightarrow -0} g(x)$



Solve, and graph the solutions on the given number lines.

7. $|x + 4| < 2$ 

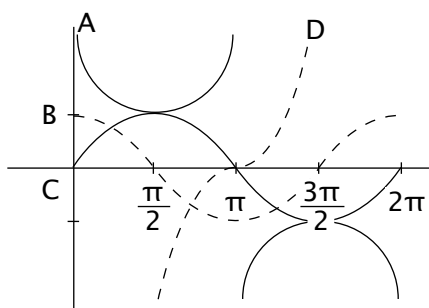
8. $\sqrt{x-2} \geq 4$ 

Follow the directions.

9. Find the 8th term in the sequence that begins $\{2, -4, 8\}$.

10. Compute $\sum_{a=1}^3 \{2^{a+1}\}$.

Use the graph to answer the questions.



11. Which of the graphs above shows $f(x) = \cos x$?

12. What kind of graph is C?

13. Which graph shows $f(x) = \csc x$?

