

Precalculus
Limits

Name _____

Find each limit.

1. $\lim_{x \rightarrow 3} (4x - 5)$

9. $\lim_{x \rightarrow \frac{1}{2}} 3^x$

2. $\lim_{x \rightarrow -1} (x^2 + 4x - 3)$

10. $\lim_{x \rightarrow 8} \log_2 x$

3. $\lim_{x \rightarrow 0} (x+1)(x+2)(x-6)$

11. $\lim_{x \rightarrow \frac{\pi}{2}} \sin x$

4. $\lim_{x \rightarrow 9} \sqrt{x-4}$

12. $\lim_{x \rightarrow \infty} x^2$

5. $\lim_{x \rightarrow 0^+} \sqrt{x-4}$

13. $\lim_{x \rightarrow -\infty} x^2$

6. $\lim_{x \rightarrow 0^-} \sqrt{x-4}$

14. $\lim_{x \rightarrow \infty} x^3$

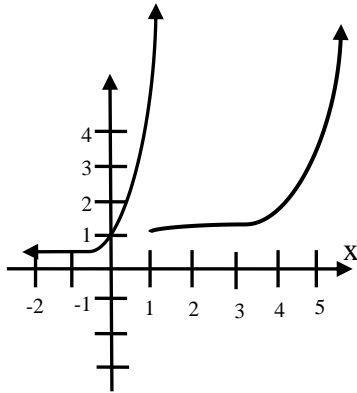
7. $\lim_{x \rightarrow 0} \sqrt{x-4}$

15. $\lim_{x \rightarrow -\infty} x^3$

8. $\lim_{x \rightarrow -3^-} |x+2|$

16. $\lim_{x \rightarrow \infty} x^3 + 2x^2 - 3x + 4$

17.

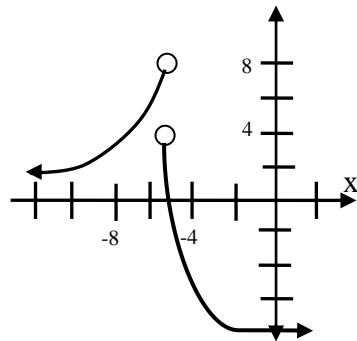


a. $\lim_{x \rightarrow 1^-} f(x)$

b. $\lim_{x \rightarrow 1^+} f(x)$

c. $\lim_{x \rightarrow 1} f(x)$

18.

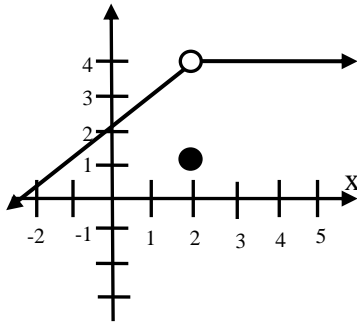


a. $\lim_{x \rightarrow -\infty} f(x)$

b. $\lim_{x \rightarrow -5} f(x)$

c. $\lim_{x \rightarrow 1} f(x)$

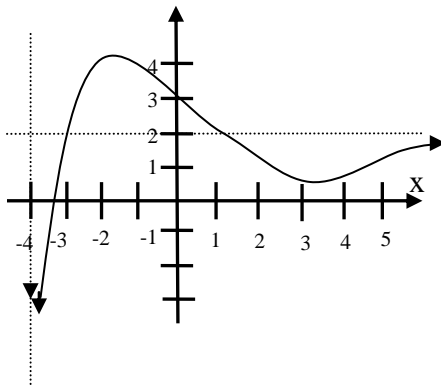
19.



a. $\lim_{x \rightarrow 2} f(x)$

a. $\lim_{x \rightarrow 0} f(x)$

20.



b. $\lim_{x \rightarrow 4} f(x)$

c. $\lim_{x \rightarrow -4^+} f(x)$

d. $\lim_{x \rightarrow \infty} f(x)$