1. Evaluate the limit below, if possible.

$$\lim_{x\to 7} \frac{\sqrt{6x-26}-4}{8x-56}$$

A. 0.125

B. $\infty$

C. 0.016

D. 0.094

E. None of the above

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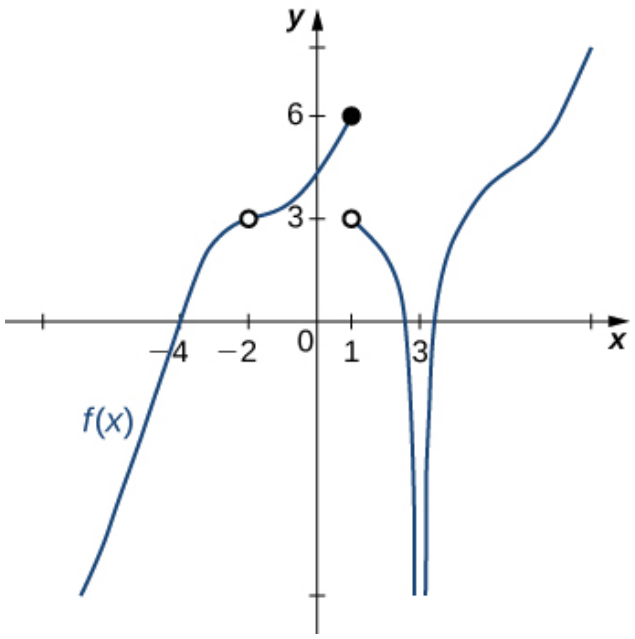
2. For the graph below, evaluate the limit: $\lim_{x\to -4} f(x)$.




A. $-6$

B. $-\infty$

C. 0

D. The limit does not exist

E. None of the above

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3. Based on the information below, which of the following statements is always true?

   f(x)$approaches 10.453 as$x$approaches \infty$.

   A. $f(x)$ is undefined when $f(x)$ is large enough.

   B. $f(x)$ is close to or exactly $\infty$ when $x$ is large enough.

   C. $f(x)$ is undefined when $x$ is large enough.

   D. $f(x)$ is close to or exactly 10.453 when $x$ is large enough.

   E. None of the above are always true.

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4. To estimate the one-sided limit of the function below as $x$ approaches 7 from the right, which of the following sets of numbers should you use?

$$\frac{\frac{7}{x} - 1}{x - 7}$$

   A. $\{7.1000, 7.0100, 7.0010, 7.0001\}$

   B. $\{7.0000, 6.9000, 6.9900, 6.9990\}$

   C. $\{6.9000, 6.9900, 7.0100, 7.1000\}$

   D. $\{6.9000, 6.9900, 6.9990, 6.9999\}$

   E. $\{7.0000, 7.1000, 7.0100, 7.0010\}$

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5. Evaluate the limit below, if possible.

$$\lim_{x \to 9} \frac{\sqrt{5x - 9} - 6}{9x - 81}$$

   A. 0.083

   B. 0.046

   C. $\infty$

D. 0.248

E. None of the above

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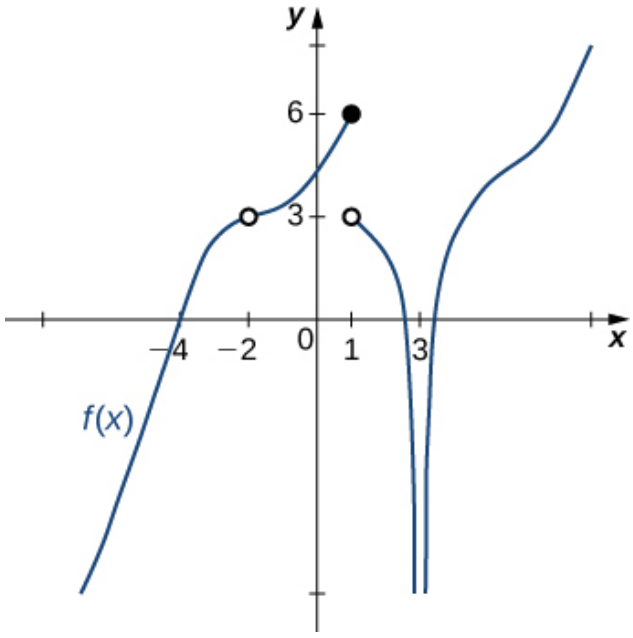
6. For the graph below, find the value(s) $a$ that makes the statement true: $\lim_{x \to a} f(x)$ does not exist.




A. $-2$

B. 3

C. 1

D. Multiple $a$ make the statement true.

E. No $a$ make the statement true.

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7. Evaluate the one-sided limit of the function $f(x)$ below, if possible.

$$\lim_{x \to 2^-} \frac{-8}{(x-2)^3} + 5$$

A. $f(2)$

B. $\infty$

C. $-\infty$

D. The limit does not exist

E. None of the above

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8. Evaluate the one-sided limit of the function $f(x)$ below, if possible.

$$\lim_{x \to 1^-} \frac{-9}{(x+1)^9} + 5$$

A. $\infty$

B. $-\infty$

C. $f(1)$

D. The limit does not exist

E. None of the above

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9. Based on the information below, which of the following statements is always true?

$$As$$

x*approaches*7,f(x)*approaches*5.182.

A. $f(5)$ is close to or exactly 7

B. $f(5) = 7$

C. $f(7)$ is close to or exactly 5

D. $f(7) = 5$

E. None of the above are always true.

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10. To estimate the one-sided limit of the function below as $x$ approaches 9 from the left, which of the following sets of numbers should you use?

$$\frac{\frac{9}{x} - 1}{x - 9}$$

A. $\{9.1000, 9.0100, 9.0010, 9.0001\}$

B. $\{8.9000, 8.9900, 8.9990, 8.9999\}$

C. $\{8.9000, 8.9900, 9.0100, 9.1000\}$

D. $\{9.0000, 9.1000, 9.0100, 9.0010\}$

E. $\{9.0000, 8.9000, 8.9900, 8.9990\}$

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