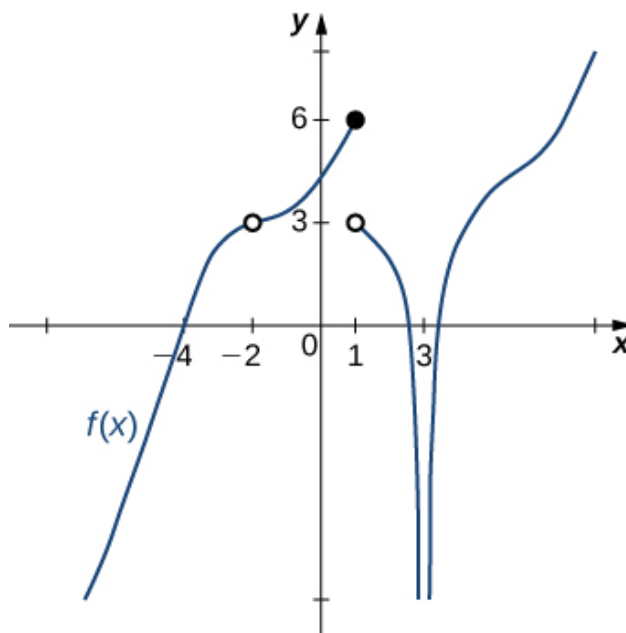1. For the graph below, find the value(s) a that makes the limit true: $\lim_{x \to a} f(x) = -\infty$.

A. $-\infty$

B. -2

C. 3

D. Multiple a make the limit true.

E. No a make the limit true.

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

$$f(x) \text{ approaches } 13.85 \text{ as } x \text{ approaches } \infty.$$

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

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

C. $f(x)$ is close to or exactly 13.85 when x is large enough.

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

E. None of the above are always true.

3. Evaluate the limit below, if possible.

$$\lim_{x \to 7} \frac{\sqrt{7x - 24} - 5}{8x - 56}$$

   A. ∞

   B. 0.012

   C. 0.100

   D. 0.087

   E. None of the above

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

$$\lim_{x \to -5+} \frac{-3}{(x - 5)^9} + 8$$

   A. $f(-5)$

   B. ∞

   C. $-\infty$

   D. The limit does not exist

   E. None of the above

5. To estimate the one-sided limit of the function below as x approaches 2 from the left, which of the following sets of numbers should you use?

$$\frac{\frac{2}{x} - 1}{x - 2}$$

   A. $\{2.0000, 2.1000, 2.0100, 2.0010\}$

   B. $\{2.0000, 1.9000, 1.9900, 1.9990\}$

C. $\{1.9000, 1.9900, 2.0100, 2.1000\}$

D. $\{2.1000, 2.0100, 2.0010, 2.0001\}$

E. $\{1.9000, 1.9900, 1.9990, 1.9999\}$