
QUESTION 1 (1 pts)

A tangent line is:

- A. A line that goes through a circle.
- B. A line that touches a curve at a single point.
- C. A line that intersects two points on a curve.
- D. A curve.

QUESTION 2 (1 pts)

A secant line is:

- A. A line that touches a curve at a single point.
- B. A curve.
- C. A line that intersects two points on a curve.
- D. The diameter of a circle.

QUESTION 3 (1 pts)

What is the slope of the tangent line?

- A. $y = mx + b$
- B. The secant line.
- C. The average velocity.
- D. The limit of the slopes of the secant lines.

QUESTION 4 (1 pts)

What is the slope of the secant line?

- A. The average velocity.
- B. The tangent line.
- C. The diameter of a circle.
- D. The instantaneous velocity.

QUESTION 5

(1 pts)

What is the instantaneous velocity?

- A. Change in position over change in time.
- B. The slope of the tangent line.
- C. $s(t) = 4.9t^2$
- D. Acceleration.

QUESTION 6

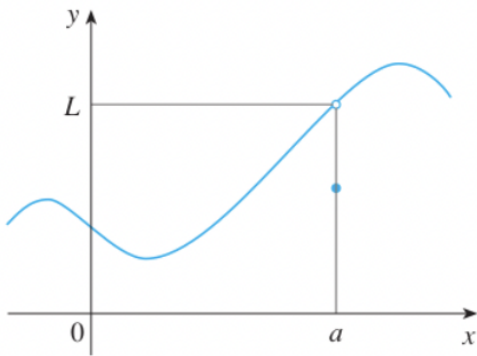
(1 pts)

$\lim_{x \rightarrow a} f(x) = L$ means:

- A. "the limit as x approaches a is $f(x)$ "
- B. "the limit of $f(x)$, as x approaches a , does not exist"
- C. "the values of $f(x)$, as x approaches a , approaches L "
- D. "the limit, L , equals $f(x)$ "

QUESTION 7

(1 pts)



Which of the following represents the graph above?

- A. $L \neq f(a)$
- B. $f(a)$ not defined.
- C. $L = f(a)$
- D. $\lim_{x \rightarrow a} f(x) = \infty$

QUESTION 8

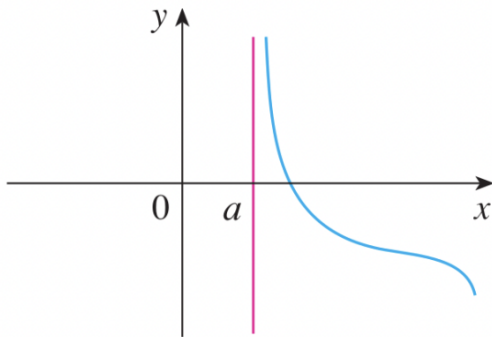
(1 pts)

$\lim_{x \rightarrow a} f(x) = L$ if and only if:

- A. $\lim_{x \rightarrow a^+} f(x) = L$ and $\lim_{x \rightarrow a^-} f(x) = M$, with $L \neq M$
- B. $\lim_{x \rightarrow a^+} f(x) = L$ and $\lim_{x \rightarrow a^-} f(x) = L$
- C. $\lim_{x \rightarrow a^+} f(x) = L$ does not exist.
- D. $\lim_{x \rightarrow a^-} f(x) = L$ does not exist.

QUESTION 9

(1 pts)



Which of the following represents the graph above?

- A. $\lim_{x \rightarrow a^-} f(x) = \infty$
- B. $\lim_{x \rightarrow a} f(x) = \infty$
- C. $\lim_{x \rightarrow a} f(x)$ does not exist.
- D. $\lim_{x \rightarrow a^+} f(x) = \infty$

QUESTION 10

(1 pts)

Which of the following is a case when the vertical line, $x = a$, is called a vertical asymptote of the curve $y = f(x)$?

- A. When the limit does not exist.
- B. When $x = y$
- C. $\lim_{x \rightarrow a} f(x) = \infty$
- D. When there is a horizontal asymptote.