

11 Lecture - MTH101

Important Mcqs

1. What is the limit of $f(x)$ as x approaches 2 if $f(x) = x^2 - 3x + 2$?
A. 1
B. 2
C. 3
D. 4
Answer: D. 4
2. What is the limit of $g(x)$ as x approaches 0 if $g(x) = \sin(x)/x$?
A. 0
B. 1
C. -1
D. Does not exist
Answer: B. 1
3. What is the limit of $h(x)$ as x approaches infinity if $h(x) = 5/x$?
A. 0
B. 5
C. infinity
D. Does not exist
Answer: A. 0
4. What is the limit of $j(x)$ as x approaches 1 if $j(x) = (x - 1)/(x^2 - 1)$?
A. 0
B. 1
C. -1
D. Does not exist
Answer: B. 1
5. What is the limit of $k(x)$ as x approaches infinity if $k(x) = (3x - 2)/(4x + 1)$?
A. $3/4$
B. $2/3$
C. $3/1$
D. Does not exist
Answer: A. $3/4$

6. What is the limit of $f(x)$ as x approaches 0 if $f(x) = (2x + 1)/(x - 3)$?

- A. $1/3$
- B. $2/3$
- C. $-1/3$
- D. Does not exist

Answer: D. Does not exist

7. What is the limit of $g(x)$ as x approaches 2 if $g(x) = (x^2 - 4)/(x - 2)$?

- A. 0
- B. 1
- C. 2
- D. Does not exist

Answer: C. 2

8. What is the limit of $h(x)$ as x approaches 3 if $h(x) = \sqrt{x - 3}$?

- A. 0
- B. 1
- C. 3
- D. Does not exist

Answer: D. Does not exist

9. What is the limit of $j(x)$ as x approaches infinity if $j(x) = e^{-2x}$?

- A. 0
- B. 1
- C. -1
- D. Does not exist

Answer: A. 0

10. What is the limit of $k(x)$ as x approaches 1 if $k(x) = (x - 1)^2/|x - 1|$?

- A. 0
- B. 1
- C. Does not exist
- D. infinity

Answer: C. Does not exist