

2 Lecture - MTH101

Important Mcqs

1. What is the absolute value of -9?

- a. -9
- b. 9
- c. 0
- d. Undefined

Answer: b. 9

2. What is the absolute value of 0?

- a. -1
- b. 0
- c. 1
- d. Undefined

Answer: b. 0

3. What is the derivative of the absolute value function?

- a. $1/x$
- b. $-1/x$
- c. 0
- d. step function

Answer: d. step function

4. Which of the following is true about the absolute value function?

- a. It is a continuous function for all real numbers.
- b. It is a discontinuous function for all real numbers.
- c. It is a differentiable function for all real numbers.
- d. It is an odd function.

Answer: a. It is a continuous function for all real numbers.

5. What is the range of the absolute value function?

- a. $(-\infty, \infty)$
- b. $[0, \infty)$
- c. $[0, 1)$
- d. $[-1, 1]$

Answer: b. $[0, \infty)$

6. **Which of the following is true about the absolute value function graph?**

- a. It is a straight line passing through the origin.
- b. It is a straight line passing through the point (1,1).
- c. It is a V-shaped curve with the vertex at the origin.
- d. It is a U-shaped curve with the vertex at the origin.

Answer: c. It is a V-shaped curve with the vertex at the origin.

7. **What is the limit of the absolute value function as x approaches infinity?**

- a. -?
- b. ?
- c. 0
- d. Does not exist

Answer: b. ?

8. **Which of the following is true about the absolute value of a negative number?**

- a. It is negative.
- b. It is positive.
- c. It is zero.
- d. It is undefined.

Answer: b. It is positive.

9. **What is the distance between points (3,4) and (1,2)?**

- a. 1
- b. 2
- c. ?2
- d. ?10

Answer: c. ?2

10. **Which of the following is true about the integral of the absolute value function?**

- a. It is always positive.
- b. It is always negative.
- c. It is always zero.
- d. It can be positive, negative, or zero depending on the limits of integration.

Answer: d. It can be positive, negative, or zero depending on the limits of integration.