# 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. $(-?$, ?)
b. $[0, ?)$
c. $[0,1)$
d. $[-1,1]$

Answer: b. [0, ?)
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.

