

Every bounded sequence is convergent.

- A. True
- B. False

ANSWER: A

Every open interval is bounded.

- A. True
- B. False

ANSWER: A

Every closed interval is finite.

- A. True
- B. False

ANSWER: B

Square root of 8 is a rational number.

- A. True
- B. False

ANSWER: B

The set  $S = \{x : x \text{ is a real number and } x < 5\}$ .

- A. The set A is bounded above
- B. The set A is bounded below
- C. The set A is bounded
- D. None of these

ANSWER: A

The sum of two irrational numbers is an irrational number.

- A. True

B. False

ANSWER: A

If left hand limit and right hand limits of a functions are equal and finite at  $x = a$ , then --- .

A. Function is bounded at  $x = a$

B. Function is continuous at  $x = a$

C. Limit of function exists at  $x = a$

D. None of these

ANSWER: C

The constant function is always continuous.

A. True

B. False

ANSWER: A

The constant function is always bounded.

A. True

B. False

ANSWER: A

Every differentiable function is always continuous.

A. True

B. False

ANSWER: A

Every continuous function is always differentiable.

A. True

B. False

ANSWER: B

The absolute function is differentiable at  $x = 0$ .

A. True

B. False

ANSWER: B

The graph of a linear function is.

A. Straight line parallel to x axis

B. Straight line parallel to y axis

C. Straight line

D. None of these

ANSWER: C

The graph of absolute of x is.

A. V shaped

B. U shaped

C. Zigzag shaped

D. None of these

ANSWER: A

The Maclurine series is taken about.

A.  $X = -1$

B.  $X = 0$

C.  $X = 1$

D. None of these

ANSWER: B

A constant of integration is involved in the definite integrals.

A. True

B. False

ANSWER: B

The Taylor series is derived from the Maclurine series.

A. True

B. False

ANSWER: B

Maclurine series is a special case of Taylor series.

A. True

B. False

ANSWER: A

The graph of  $\text{Exp}(x)$  is ----.

A. Strictly increasing

B. Steadly increasing

C. Strictly decreasing

D. Steadly decreasing

ANSWER: A

The tangent and normal lines at a point are perpendicular to each other.

A. True

B. False

ANSWER: A

Using general notation the length of major axis of an ellipse is.

A.  $L = 2a$

B.  $L = 3a$

C.  $L = 4a$

D. None of these

ANSWER: A

$X = a\cos\theta, y = b\sin\theta$  are parametric equations of -----.

A. Circle

B. Ellipse

C. Hyperbola

D. Parabola

ANSWER: B

$X = a\cos\theta, y = a\sin\theta$  are parametric equations of -----.

A. Circle

B. Ellipse

C. Hyperbola

D. Parabola

ANSWER: A

To find asymptote parallel to y axis put coefficient of highest power of.

A. X is equal to zero

B. Y is equal to zero

C. Xy is equal to zero

D. None of these

ANSWER: B

To remove xy term by rotation, we find  $\cot(2\alpha) =$  -----.

A.  $(A-C)/2B$

B.  $(A+C)/2BS$

C.  $(A-C)/2A$

D. None of these

ANSWER: A

In translation of axes direction remains same while the origin is changed.

A. True

B. False

ANSWER: A

In rotation of axes, direction is changed while origin remains same.

A. True

B. False

ANSWER: A

The singular points have ---- main types.

A. Two

B. Three

C. Four

D. Five

ANSWER: B

Every node is a cusp.

A. True

B. False

ANSWER: B

Every cusp is a singular point.

A. True

B. False

ANSWER: A

