FBQ1: A convergent sequence has only \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ limit(s)

Answer: One

FBQ2: If a sequence {Xn} is convergent then it is\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Answer: Bounded

FBQ3: A sequence {(-1)n} is\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Answer: Bounded

FBQ4: A sequence is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Answer: convergent

FBQ5: The sequence converges to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Answer: 0.5

FBQ6: is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Answer: 0.5

FBQ7: Every Cauchy sequence is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Answer: Bounded

FBQ8: A sequence of real number {Xn} is Cauchy if and only if \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Answer: Convergent

FBQ9: Let {Xn}be a convergent sequence. is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Answer: X

FBQ10: If a sequence is decreasing, then it may converge to its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Answer: Infimum

FBQ11: If a sequence is increasing, then it may converge to its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Answer: Supremum

FBQ12: A product of two convergent sequences is\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Answer: Convergent

FBQ13: Let is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(Ans to 3 decimal point)

Answer: 1.618

FBQ14: A sequence of real numbers that converges to zero is known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_sequence

Answer: Null

FBQ15: If a sequence does not have a limit, it is also called an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_sequence

Answer: Oscillating

FBQ16: Every set of real numbers has a minimum\_\_\_\_\_\_\_\_\_\_\_\_\_ (True or False)

Answer: False

FBQ17: Every set of real numbers has a maximum\_\_\_\_\_\_\_\_\_\_\_\_\_ (True or False)

Answer: False

FBQ18: Every set of real numbers which is bounded above has a maximum\_\_\_\_\_\_\_\_\_\_\_\_\_ (True or False)

Answer: False

FBQ19: Every set of real numbers which is bounded below has a minimum\_\_\_\_\_\_\_\_\_\_\_\_\_ (True or False)

Answer: False

FBQ20: There exists a set of real numbers with a supremum but no maximum\_\_\_\_\_\_\_\_\_\_\_\_\_ (True or False)

Answer: True

FBQ21: The is \_\_\_\_\_\_\_

Answer: 2

FBQ22: " + " is \_\_\_\_\_\_\_\_\_\_\_ operation on

Answer: binary operation

FBQ23: If a real number is not rational then it is an \_\_\_\_\_\_\_

Answer: Integer

FBQ24: If a real number is not rational then it is an \_\_\_\_\_\_\_\_\_\_ number

Answer: Irrational

FBQ25: A number which is neither positive nor negative is

Answer: 0

FBQ26: The supremum is also called the \_\_\_\_ upper bound

Answer: Least

FBQ27: The harmonic series \_\_\_\_

Answer: Diverges

FBQ28: A monotone sequence of real numbers is properly divergent if and only if it is \_\_\_\_\_\_\_

Answer: Unbounded

FBQ29: is an example of \_\_\_\_\_\_\_\_\_\_\_ numbers

Answer: Irrational

FBQ30: Concept of the divisibility only exists in set of \_\_\_\_\_\_\_\_\_\_

Answer: Integers

FBQ31: The limit of n+1n√n is

Answer: 0

FBQ32: A convergent sequence has only \_\_\_\_\_\_\_\_\_\_\_\_\_\_ limit(s)

Answer: 1

FBQ33: Every convergent sequence has \_\_\_\_\_\_\_\_\_\_\_one limit

Answer: 7

FBQ34: Give the next 3 terms of the sequence 0,1,1,2,3,5,8,………,\_\_\_\_

Answer: 13, 21, 34

FBQ35: Two Sets A and B are said to be \_\_\_\_\_\_\_ if and only if they have the same elements but possibly with different listings.

Answer: Equal

FBQ36: A sequence which does not converge to some real number is said to be\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Answer: Divergent

FBQ37: A sequence in which the consecutive terms have opposite signs is called\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ sequence

Answer: Alternating

FBQ38:

Answer: x<=y

FBQ39: If is an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Answer: Interval

FBQ40: A sequence {Xn} is convergent to the limit if and only if all of its…\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.converge to the same limit \_\_\_\_\_\_\_\_\_\_\_

Answer: Terms

FBQ41: The range of is\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Answer: (0,3]

FBQ42: A continuous real-valued function defined on a closed and bounded interval \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ be bounded

Answer: Must

FBQ43: The range of is\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Answer: (-1/2, 1/2)

FBQ44: The range of is\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Answer: [-1/2, ½]

FBQ45:

Answer: 1

FBQ46:

Answer: 0.5

FBQ47:

Answer: 0.5

FBQ48: Given the set

Answer: 2

FBQ49: what is the value of a\_\_\_\_\_\_\_\_\_\_\_\_

Answer: 0

FBQ50:

Answer: Complete

MCQ1: Define a sequence Then the values of are

Answer:

MCQ2:

Answer:

MCQ3:

Answer:

MCQ4: Define

Answer: 0

MCQ5:

Answer: r

MCQ6: Consider the function

Answer: 1

MCQ7: Consider the function. Then

Answer: 0

MCQ8:

Answer: None of the options

MCQ9:

Answer: 2

MCQ10:

Answer:

MCQ11:

Answer: 2

MCQ12:

Answer: 1

MCQ13:

Answer:

MCQ14: The inequality

Answer:

MCQ15: Solve the equation

Answer:

MCQ16: Find all which satisfy

Answer:

MCQ17: Solve the inequality Express your answer in interval notation

Answer:

MCQ18: Solve the equation

Answer:

MCQ19:

Answer:

MCQ20:

Answer:

MCQ21:  Solve the inequality Express your answer in interval notation.

Answer:

MCQ22: Find all which satisfy

Answer:

MCQ23:  Solve the inequality Express your answer in interval notation.

Answer:

MCQ24: Solve the inequality Express your answer in interval notation.

Answer:

MCQ25:  Solve the equation

Answer:

MCQ26:

Answer: 3/4

MCQ27: Let The domain of is the set of all real numbers except

Answer:

MCQ28:

Answer:

MCQ29: Consider the function

Answer:

MCQ30: Consider the function is

Answer:

MCQ31:

Answer:

MCQ32:

Answer:

MCQ33:

Answer:

MCQ34:

Answer:

MCQ35:

Answer:

MCQ36: Let

Answer: 2-32

MCQ37:

Answer: -4

MCQ38:

Answer: 6

MCQ39:

Answer: -1

MCQ40:

Answer: 1

MCQ41: Let

Answer: 3

MCQ42: Let

Answer: 5

MCQ43:

Answer: 13

MCQ44:

Answer: Does not exist

MCQ45:

Answer: 1

MCQ46:

Answer: 2

MCQ47:

Answer: Does not exist

MCQ48:

Answer: -2, 3

MCQ49: An example of a positive convergent sequence

Answer:

MCQ50: An example of a positive divergent sequence

Answer: n