Grand Quiz Spring 2021

Subject Code MTH202 lecture 1 to 22

Solved by Riz Mughal

Dear Viewers:

I'm providing 100% correct quiz solution. You can visit my YouTube channel and get more information about all other subjects' quizzes and final year project (CS619).

Sialkot
Punjab, Pakistan

Rizwanqadeer848@gmail.com

https://www.facebook.com/groups/923887914750307

https://www.youtube.com/channel/UCINsFwDiB62SValCcPDZbRQ/playlists

RIZ MUGHAL (SQA ENGINEER)

MTH202:Grand Quiz

Stating in words the elements of a set is _____.

Select the correct option

○	Tabular Form
●	Descriptive Form
○	Both a and b
○	Set builder Form

RIZ MUGHAL (SQA ENGINEER)

MTH202:Grand Quiz

Let R be a relation on a set A. If R is symmetric then its compliment is _____ .

Select the correct option

○	Antisymmetric
○	Irreflexive
●	Symmetric
○	Reflexive

RIZ MUGHAL (SQA ENGINEER)

Question # 3 of 30 (Start time: 09:33:33 AM, 22 June 2021)

Which of the followings is the truth value of ~p iff ~q, when p is true and q is false ?
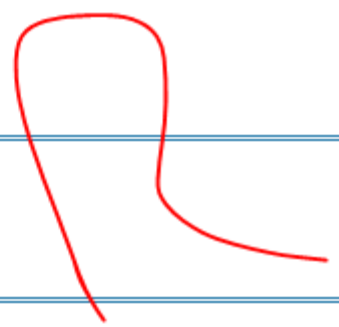
Select the correct option

○ True

● False

MTH202:Grand Quiz

If a function is recursively defined as f(0) = 4 &
f(n + 1) = 3f (n) + 3 then f(1)=............

Select the correct option
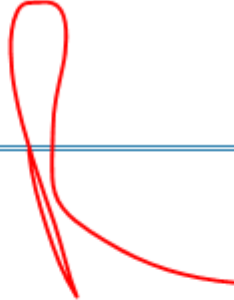
25

◯

10

◯

20

◯

15

●

RIZ MUGHAL (SQA ENGINEER)

MTH202:Grand Quiz

A sequence whose terms alternate in sign is called an _____.

Select the correct option

○	Series
○	Cauchy sequence
○	None of the above
●	Alternating sequence

RIZ MUGHAL (SQA ENGINEER)

Question # 6 of 30 (Start time: 09:35:34 AM, 22 June 2021)

Which of the following is not correct for a 'Sequence'?

Select the correct option

○ A sequence is just a list of elements usually written in a row.

○ A sequence is a function whose domain is the set of natural numbers.

● A sequence is a relation whose domain is the set of natural numbers

○ Terms of the sequence are listed in order of increasing subscripts.

RIZ MUGHAL (SQA ENGINEER)

MTH202:Grand Quiz

p <--> q is logically equivalently to ---------

Select the correct option

○	p XOR q
○	~ p v q
●	~ (p XOR q)
○	~ (p --> q)

RIZ MUGHAL (SQA ENGINEER)
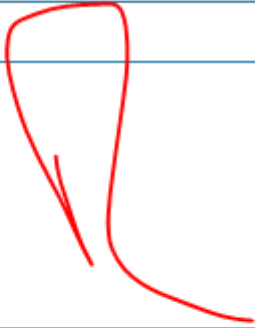
Question # 8 of 30 (Start time: 09:36:09 AM, 22 June 2021)

If p <--> q is True, then Truth value of p --> q is _____.

Select the correct option

⬤ True

◯ False
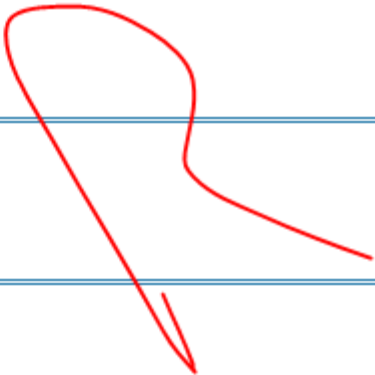
MTH202:Grand Quiz

Two functions 'f' and 'g' from X to Y are said to be equal if and only if ....

Select the correct option
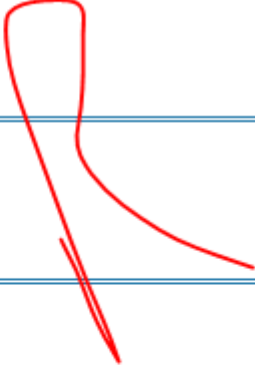
- ○ none of these
- ○ $f(x)=g(x)$ for some 'x' belongs to X
- ○ $f(x)=g(x)$ for a fix 'x' belongs to X
- ● $f(x)=g(x)$ for all 'x' belongs to X

RIZ MUGHAL (SQA ENGINEER)

MTH202:Grand Quiz

If p <--> q is True, then ------

Select the correct option

	Only q is True.
⦿	p and q both are True.
○	Only p is True.
○	None of these.

RIZ MUGHAL (SQA ENGINEER)

Question # 11 of 30 (Start time: 09:37:17 AM, 22 June 2021)

The number of elements in the power set of $P(\phi)$ denoted by $P(P(\phi))$ is

Select the correct option

Reloa

0

1

● 2

4

RIZ MUGHAL (SQA ENGINEER)

MTH202:Grand Quiz

Y+ 7 =10 is a proposition?

Select the correct option

○	True
●	False

MTH202:Grand Quiz

Real valued function is a function that assigns _____ to each member of its domain.

Select the correct option

○	positive real number
○	any arbitrary real number
●	only a real number
○	negative real number

RIZ MUGHAL (SQA ENGINEER)
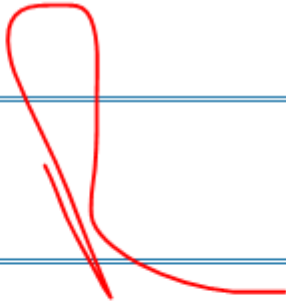
MTH202:Grand Quiz

The set of all vowels in the English alphabet
V = { a , e , i , o , u } is _____.

Select the correct option

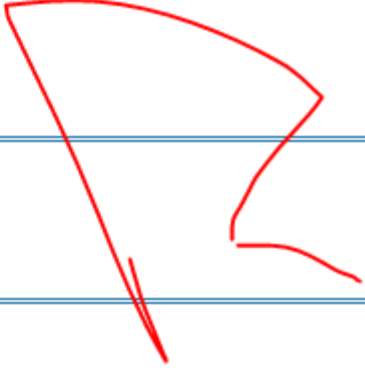|	
○	Descriptive Form
○	Both a and b
○	Set builder Form
●	Tabular Form

RIZ MUGHAL (SQA ENGINEER)

Question # 15 of 30 (Start time: 09:38:29 AM, 22 June 2021)

An argument is _____ if the conclusion is false when all the premises are true.

Select the correct option

○	None of the above
○	True
○	Valid
●	Invalid

MTH202:Grand Quiz

The inverse relation R^(-1) from B to A is defined as _____.

Select the correct option
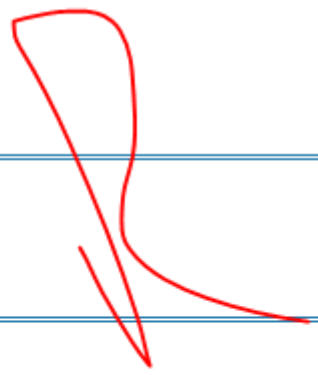
● R^(-1)= {(b,a) ∈B×A | (a,b) ∈R}

○ R^(-1)= {(b,a) ∉ B×A | (a,b) ∈R}

○ R^(-1)= {(b,a) ∈B×A | (b,a) ∈R}

○ None of the above

RIZ MUGHAL (SQA ENGINEER)

MTH202:Grand Quiz

The Negation of (p OR ~p) is ----------

Select the correct option

○ ~p

○ t (where t is tautology.)

○ p

● c (where c is contradiction.)

RIZ MUGHAL (SQA ENGINEER)

MTH202:Grand Quiz

The two functions 'f' and 'g' are equal if ....

Select the correct option

- ● $f(x) = 3x$ and $g(x) = \frac{6x^2+3x}{2x+1}$ for all $x \in R$

- ○ $f(x) = 3x$ and $g(x) = \frac{6x^2+3x}{2x^2+1}$ for all $x \in R$

- ○ $f(x) = 3x$ and $g(x) = \frac{6x^2+3x^3}{2x+1}$ for all $x \in R$

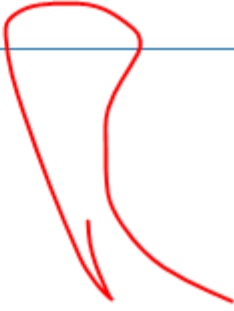- ○ $f(x) = 3x$ and $g(x) = \frac{6x^2+3x}{2x}$ for all $x \in R$

MTH202:Grand Quiz

p is sufficient for q mean "$p \rightarrow q$"

Select the correct option

	True
○	

	False
●	

RIZ MUGHAL (SQA ENGINEER)

Question # 20 of 30 (Start time: 09:39:40 AM, 22 June 2021)

If a set A contains n elements then the number of elements in its power set P(A) is

Select the correct option

$2(n)$

2^n

n^2

n^0

RIZ MUGHAL (SQA ENGINEER)

MTH202:Grand Quiz

If A-B=A,which of the following statement is true?

Select the correct option

○	B is the subset of A
●	All the given statements are false.
○	A=B
○	A is the subset of B

RIZ MUGHAL (SQA ENGINEER)

MTH202:Grand Quiz

A statement that no objects belong to the set, belongs to _____.

Select the correct option
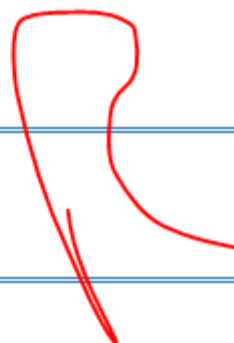
●	Restriction
○	Recursion
○	None of the mentioned
○	Base

RIZ MUGHAL (SQA ENGINEER)

MTH202:Grand Quiz

If $f(x) = 2x$ and $g(x) = x^2$ then $f(g(x))$ is ....

Select the correct option

○	2
○	x^3
○	$2x^3$
●	$2x^2$

RIZ MUGHAL (SQA ENGINEER)
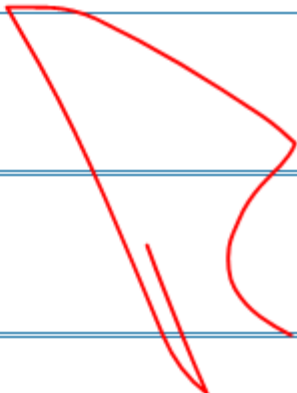
MTH202:Grand Quiz

Let s be True and r be True, then (~ s AND r) is --------- .

Select the correct option

● False

○ t   (where t is tautology.)

○ c   (where c is contradiction.)

○ True

RIZ MUGHAL (SQA ENGINEER)

MTH202:Grand Quiz

If $x \equiv -10 \pmod{15}$ Which of the following integers are valid solution for x ?

Select the correct option

	6
○	
●	5
○	3
○	7

RIZ MUGHAL (SQA ENGINEER)

Question # 26 of 30 (Start time: 09:41:10 AM, 22 June 2021)

$$y = \sqrt{x}$$

is an .... function form

$$R^+$$

to

$$R$$

.

Select the correct option

○	None of these.
○	both of above
○	onto
●	one to one

RIZ MUGHAL (SQA ENGINEER)

Question # 27 of 30 (Start time: 09:41:26 AM, 22 June 2021)

Let t be tautology, then ~ (~ t) is ----------
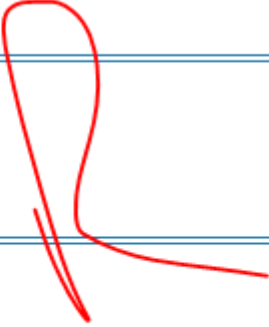
Select the correct option

○	c. (where c is contradiction.)
○	None
○	~ t
●	t

RIZ MUGHAL (SQA ENGINEER)

Question # 28 of 30 (Start time: 09:41:43 AM, 22 June 2021)

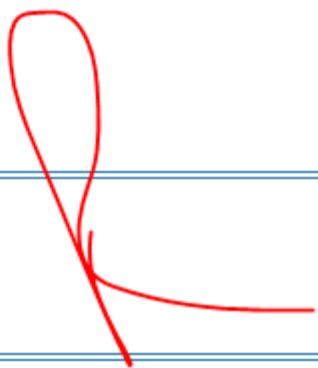Range of function $f(x) = {e^x}$ is.................

Select the correct option

- Set of Real number
- ● Set of positive Real numbers
- Set of integers
- Set of negative Real number.

RIZ MUGHAL (SQA ENGINEER)

MTH202:Grand Quiz

720 = ...

Select the correct option

○	4!
●	6!
○	7!
	5!

RIZ MUGHAL (SQA ENGINEER)

Question # 30 of 30 (Start time: 09:42:12 AM, 22 June 2021)

The set of integers "Z" is a subset of the set of _____.

Select the correct option

- ○ Prime Numbers

- ○ Irrational Numbers

- ● Rational Numbers

- ○ Natural Numbers

RIZ MUGHAL (SQA ENGINEER)