

The default category for questions shared in context 'MTH101'.

FBQ1

1.00000000

FBQ2

1.00000000

FBQ3

1.00000000

FBQ4

1.00000000

FBQ5

1.00000000

FBQ6

1.00000000

FBQ7

The common ratio is _____, when the fourth term is divided by the second term is 9

3

1.0000000

0.0000000

FBQ8

In slope-intercept form, the equation of a line passing through the point $(-3, 2)$ and parallel to $4x - y = 7$ is given as _____.

* $y = 4x + 4$ *

1.0000000

0.0000000

FBQ9

The distance between the points $(-3, 19)$, $(-7, -5)$ to the nearest tenth is _____.

24.3

1.0000000

0.0000000

FBQ10

Power set of empty set has exactly _____ number of subset.

Zero

1.0000000

0

1.0000000

FBQ11

The x intercept of $9x - 2y = 18$ is _____

* $(3, 0)$ *

1.0000000

0.0000000

FBQ12

What is the coordinate of the y-intercept of the linear equation $9x - 2y = 18$ is _____.

* $(0, 2)$ *

1.0000000

0.0000000

FBQ13

The leading coefficient of $y = 6x^3 - 3x^2 + 4x + 5$ is _____.

6

1.0000000

0.0000000

FBQ14

If A and B are sets and $A \cap B = A \cap C$, then the two sets are $A \subseteq B$.

* $A=B$ *

1.0000000

Equal

1.0000000

FBQ15

The intersect of the sets $\{1,2,5\}$ and $\{1,2,6\}$ is the set

* $\{1, 2\}$ *

1.0000000

0.0000000

FBQ16

The solution of a quadratic equation is sometimes called _____

Roots

1.0000000

0.0000000

FBQ17

Given the circle , the radius of the circle is _____

Zero

1.0000000

0

1.0000000

FBQ18

The equation of the line passing through the point $(-3,7)$ with slope zero can be written as _____

* $y=7$ *

1.0000000

0.0000000

FBQ19

The Common difference of sequence $2, -2, -6, \dots$ is _____

-4

1.0000000

0.0000000

FBQ20

The complex number is represented by _____

* $x+iy$ *

1.0000000

0.0000000

FBQ21

Sets that have unlimited numbers of elements are referred to as _____.

infinite set

1.0000000

0.0000000

FBQ22

The radius of the circle with the equation: $x^2 + y^2 - 4x + 6y - 12 = 0$ is _____.

5

1.0000000

0.0000000

FBQ23

The sum of $-5 + 4i + 9 + 6i$ in standard form ($a + bi$) is _____.

* $4 + 10i$ *

1.0000000

0.0000000

FBQ24

The cardinality of the Power set of the set $\{0, 1, 2\}$ is _____.

6

1.0000000

0.0000000

FBQ25

The values of x in equation $x^2 - 5x + 6 = 0$ are _____.

5 and 1

1.0000000

1 and 5

1.0000000

FBQ26

The union of the sets $\{1, 2, 5\}$ and $\{1, 2, 6\}$ is the set _____.

* $\{1, 2, 5, 6\}$ *

1.0000000

1.0000000

FBQ27

The individual objects in a set are called _____.

element

1.0000000

member

1.0000000

FBQ28

The Common difference of sequence 5,8,11,14,â€¦ is

3

1.0000000

0.0000000

FBQ29

Collection of well-defined objects is called a â€¦â€¦â€¦â€¦â€¦â€¦â€¦.

set

1.0000000

0.0000000

FBQ30

The set of positive integers is an example of â€¦â€¦â€¦â€¦â€¦â€¦ set

infinite

1.0000000

0.0000000

FBQ31

If $A \cap B = B \cap A$, then the sets A and B are â€¦â€¦â€¦â€¦â€¦â€¦.

commutative

1.0000000

0.0000000

FBQ32

The product of $4+i$ and $4-i$ is â€¦â€¦â€¦â€¦â€¦â€¦â€¦

17

1.0000000

0.0000000

FBQ33

A linear system of equations made up of two intersecting lines has _____ solution(s)

.

2

1.0000000

two

1.0000000

FBQ34

The Sum of the roots of the quadratic equation $3x^2 - 5x - 2$ is _____

1.0000000

1.0000000

FBQ35

The solutions of a quadratic equation $x^2 + 5x - 6 = 0$ are _____ and _____

1.0000000

1.0000000

1.0000000

1.0000000

FBQ36

In standard form $a + bi$, $3 - 5i - 5 + 11i + (9 + 6i)$ can be reduced to _____.

1.0000000

0.0000000

FBQ37

Any set that contains a definite number of elements is called _____.

1.0000000

1.0000000

FBQ38

One factor of the expression $8x^2 - 19x + 6$ is $x - 2$. The other is _____.

1.0000000

1.0000000

FBQ39

Expansion of $(3 - 6i)^2$ is _____

1.0000000

0.0000000

FBQ40

If the difference between the third term and the second term is 12, then the common difference is _____.

12

1.0000000

0.0000000

FBQ41

If Set $D = \{x: x \text{ is an odd number between } 10 \text{ and } 18\}$, the elements

{11,13,15,17}

1.0000000

0.0000000

FBQ42

The minimum value of $\sin^{-1}(\sin \frac{5\pi}{6})$ is _____.

-4

1.0000000

0.0000000

FBQ43

The numerator of the quotient $\frac{5-3i}{2+7i}$ in standard form $(a+bi)$ is _____.

-11-4i

1.0000000

0.0000000

FBQ44

When $b^2-4ac < 0$, then the equation has _____ solution.

*two complex *

1.0000000

*2 complex *

1.0000000

FBQ45

The first and seventh terms of a geometric progression are 812 and 329 respectively. Hence, the common ratio is _____.

2/3

1.0000000

0.667

1.0000000

FBQ46

If two sets have distinct elements, they are said to be $\hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in}$

disjoint

1.0000000

0.0000000

FBQ47

The slope of the linear equation $y=12x-2$ is $\hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in}$

$\frac{2}{3}$ *

1.0000000

0.5 *

1.0000000

FBQ48

The slope of the linear equation $y=-14x+7$ is $\hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in}$

$-\frac{1}{4}$ *

1.0000000

-0.25 *

1.0000000

FBQ49

If $U=\{a,b,c,d,e\}$, $A=\{a,c,e\}$ and $B=\{a,b,e\}$, then $(A \hat{\cap} B)=\hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in}$

$\{a,e\}$ *

1.0000000

0.0000000

FBQ50

The value of i^{15} is $\hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in} \hat{\in}$

$-i$ *

1.0000000

0.0000000

Multiple Choice Questions (MCQs)

MCQ1

Evaluate

5

1.0000000

34

0.0000000

7

0.0000000

8

0.0000000
MCQ2

$x=3$

1.0000000
 $x=-1$

0.0000000
 $x=-3$

0.0000000
 $x=-9$

0.0000000
MCQ3
Find the product of $4 + i$ and $4 - i$.

15

0.0000000
15

0.0000000
17

1.0000000
10

0.0000000
MCQ4
What are the center and radius of ?

0.0000000

0.0000000

1.0000000

0.0000000
MCQ5
Simply

1.0000000

0.0000000

0.0000000

0.0000000

MCQ6

Expand

$-27 - 36i$

1.0000000

$9 + 36i$

0.0000000

45

0.0000000

27

0.0000000

MCQ7

Find the next term of each sequence 4 -16, 64, -256 1024, â€¦

-4096

1.0000000

-20058

0.0000000

-1281

0.0000000

-3072

0.0000000

MCQ8

Find the next term of each sequence 4, 16, 36, 64, 100

169

0.0000000

144

1.0000000

164

0.0000000

124

0.0000000

MCQ9

Find the next term of each sequence 4, -12, 36, -108, 324

-972

1.0000000

- 625

0.0000000

-648

0.0000000

-169

0.0000000

MCQ10

Expand and simplify $(2x - 1)(x + 3)$

$x^2 + x - 5$

0.0000000

$x^2 + 2x - 6$

0.0000000

$x^2 + 3x - 1$

0.0000000

$x^2 + 5x - 3$

1.0000000

MCQ11

Factorize completely. $9x^2 - 24x - 16$

$(3x - 4)^2$

1.0000000

$(9x - 4)(x - 4)$

0.0000000

$(3x - 8)(3x - 2)$

0.0000000
(x-8)(9x-2)

0.0000000
MCQ12
(x-3)² is equal to _____

x² ∈ 6 x + 9

1.0000000
x² ∈ 9

0.0000000
x² + 9

0.0000000
x² + 6 x + 9

0.0000000
MCQ13
Find an equation whose roots are -2 and 1.

x²+x-2=0

1.0000000
x²+2x-2=0

0.0000000
x²-x-2=0

0.0000000
x²-2x-2=0

0.0000000
MCQ14
When solving a linear system of equations, you are looking for which of the following?

Point(s) of intersection

1.0000000
x intercepts

0.0000000
Roots

0.0000000
Shaded region

0.0000000

MCQ15

A linear system of equations made up of two intersecting lines has _____ solution(s)

two

0.0000000

three

0.0000000

one

1.0000000

no

0.0000000

MCQ16

If the legs of a right triangle measure 5 and 12 cm respectively, the measure of the third side is

21 cm

0.0000000

17cm

0.0000000

15 cm

0.0000000

13 cm

1.0000000

MCQ17

Which of the following is an equation of a circle?

$(x + 1)^3 = 0$

0.0000000

$y = 2x^2 + x \in \mathbb{I}$

0.0000000

$y^2 = 16x$

0.0000000

$x^2 + y^2 = 9$

1.0000000

MCQ18

The set of all $y=f(x)$ values of a relation is called the _____.

range

0.0000000

domian

1.0000000

inverse

0.0000000

function

0.0000000

MCQ19

If a system of equations has one solution, then the equations will have ____.

different slopes

1.0000000

different y intercepts

0.0000000

the same slopes

0.0000000

inverse

0.0000000

MCQ20

The solution(s) of a Quadratic Equation is/are also sometimes called ____.

root(s)

1.0000000

y- intercept(s)

0.0000000

x-intercept(s)

0.0000000

co-domian

0.0000000

MCQ21

The function completely factorized is ____.

1.0000000

0.0000000

0.0000000

0.0000000

MCQ22

All the solution(s) for are ____

1.0000000

0.0000000

0.0000000

0.0000000

MCQ23

What is the Leading Coefficient of ?

6

1.0000000

5

0.0000000

4

0.0000000

3

0.0000000

MCQ24

What is the constant of

5

1.0000000

6

0.0000000
4

0.0000000
3

0.0000000
MCQ25

5

1.0000000
11

0.0000000
3

0.0000000
4

0.0000000
MCQ26

What is the y-intercept of the line determined by the linear equation ?

1.0000000

0.0000000

0.0000000

0.0000000
MCQ27

What is the slope of the linear equation:

-12

1.0000000
-4

0.0000000
4

0.0000000

-12

0.0000000

MCQ28

Which ordered pair(s) are all the y-intercept(s) of the equation:

(0,1)

1.0000000

(0,0)

0.0000000

(1,0)

0.0000000

(0,-1) and (0,2)

0.0000000

MCQ29

never

1.0000000

$x = -1$

0.0000000

$x = -4$

0.0000000

$x = 0$

0.0000000

MCQ30

What is the radius of the circle graphed by the equation:

5

1.0000000

25

0.0000000

4

0.0000000

16

0.0000000

MCQ31

The square root of a number is the same as raising the number to the -----

(1/2) power

1.0000000
second power

0.0000000
(1/3) power

0.0000000
Third power

0.0000000
MCQ32

The x intercept of $2x - 3y = 6$ is _____

(3,0)

1.0000000
(0,-2)

0.0000000
(0,-3)

0.0000000
(-3,0)

0.0000000
MCQ33

The domain of, will be any real number _____.

except $\neq 2$

1.0000000
except $\neq 3$

0.0000000
except 2

0.0000000
except $\neq 1$

0.0000000
MCQ34

Expand and express your answer in simplest complex form $(3 + 5i)(2 - i)$

1.0000000

0.0000000

0.0000000

0.0000000

MCQ35

What is the minimum value of

-6

1.0000000

12

0.0000000

-2

0.0000000

5

0.0000000

MCQ36

1.0000000

0.0000000

0.0000000

0.0000000

MCQ37

5and 1 only

1.0000000

no solution

0.0000000

1only

0.0000000

5 only

0.0000000

MCQ38

Approximate the distance between the points $(-3, 19)$, $(-7, -5)$ to the nearest tenth:

24.3

1.0000000

17.2

0.0000000

5.3

0.0000000

6.3

0.0000000

MCQ39

The number of elements in the Power set $P(S)$ of the set $S=\{\{\hat{a}\dots\}, 1, [2,3]\}$

is

4

1.0000000

2

0.0000000

8

0.0000000

6

0.0000000

MCQ40

If A and B are sets and $A \hat{=}^a B = A \hat{=}^c B$, then

$A=B$

1.0000000

$A=\hat{a}\dots$

0.0000000

$B=\hat{a}\dots$

0.0000000

A% B

0.0000000

MCQ41

The union of the sets {1,2,5} and {1,2,6} is the set

{1,2,5,6}

1.0000000

{1,2,1,2}

0.0000000

{1,5,6,3}

0.0000000

{1,2,6,1}

0.0000000

MCQ42

The intersection of the sets {1,2,5} and {1,2,6} is the set

{1,2}

1.0000000

{5,6}

0.0000000

{2,5}

0.0000000

{1,6}

0.0000000

MCQ43

Two sets are called disjoint if their .. is empty set.

intersection

1.0000000

complement

0.0000000

Difference

0.0000000

Union

0.0000000

MCQ44

Which of the following two sets are disjoint?

$\{1,3,5\}$ and $\{2,4,6\}$

1.0000000

$\{1,3,5\}$ and $\{2,3,4\}$

0.0000000

$\{1,2,3\}$ and $\{1,2,3\}$

0.0000000

$\{1,3,5\}$ and $\{1,3,6\}$

0.0000000

MCQ45

The complement of the set A is \bar{A} .

element not in A but in the universal set

1.0000000

Universal set union A

0.0000000

some of the element in A

0.0000000

A

0.0000000

MCQ46

Individual objects in a set are called $x \in A$.

element

1.0000000

set

0.0000000

list

0.0000000

not element

0.0000000

MCQ47

Set $\{x: x \text{ is an odd number between } 10 \text{ and } 18\}$

$\{11,13,15,17\}$

1.0000000
{12,14,16,18}

0.0000000
{12,16,15,13}

0.0000000
{11,12,13,15,17}

0.0000000
MCQ48
Polar form of a complex number is $r(\cos \hat{\theta} + i \sin \hat{\theta})$

$r(\cos \hat{\theta} + i \sin \hat{\theta})$

1.0000000
 $r(\sin \hat{\theta} + i \cos \hat{\theta})$

0.0000000
 $r(\sec \hat{\theta} + i \operatorname{cosec} \hat{\theta})$

0.0000000
 $r(\tan \hat{\theta} + i \cot \hat{\theta})$

0.0000000
MCQ49
 $a^2 + b^2$ is equal to $(a+ib)(a-ib)$

$(a+ib)(a-ib)$

1.0000000
 $(a+ib)(a-b)$

0.0000000
 $(a+ib)(a-ib)$

0.0000000
 $(a+b)(a-b)$

0.0000000
MCQ50
The solution of a quadratic equation $x^2 + 5x - 6 = 0$ is

$x=1, x=-6$

1.0000000
 $x=1, x=0$

0.0000000

$x=5, x=2$

0.0000000

$x=-1, x=3$

0.0000000