

MTH104

Quiz no 1

Solved by : Math zone for Vu

Last date : 17 Nov 2023

Vu all paid services available for further

Info contact me

03235429064

03305516507

MTH104 QUIZ 1 2024 SOLVED BY IQRA AZHAR

If set A has 3 elements and set B has 4 elements, how many elements are there in the Cartesian product $B \times A$? Select the correct option

11

12

0

7

2. The set Q of rational numbers is complete. Select the correct option

True

False

3. Least common multiple of 9 and 21 is _____. Select the correct option

63

7

none of these

3

4. $\gcd(31, 15) =$ _____. Select the correct option

1

None

3

11

5. Let $a=23.52.73$ and $b=25.34.56.112$. Find $\text{lcm}(a,b)$. Select the correct option

$\text{lcm}(a,b)=23.52$

$\text{lcm}(a,b)=25.34.56.73.112$

none

$\text{lcm}(a,b)=23.52.34.73.112$

6. The interval satisfying the inequality $|x| < -3$ is _____. Select the correct option

MTH104 QUIZ 1 2024 SOLVED BY IQRA AZHAR

$(-3,3)$

$[-3,3)$

$[-3,3]$

none

7. Let $A = \{1, 2, 3\}$, $B = \{a, b, c\}$ and $C = \{x, y, z\}$. Consider the relation $R = \{(1, a), (2, b), (3, c)\}$ from A to B and relation $S = \{(a, x), (b, y), (c, z)\}$ from B to C . Then following element is a member of $R \circ S$. Select the correct option

$(2, x)$

$(1, z)$

$(1, y)$

$(3, z)$

8. The interval satisfying the inequality $0 \leq x+2 < 3$ is _____. Select the correct option

$(-2,1)$

$[-2,1]$

$[-2,1)$

none

9. If $A \times B = \{(11,7), (11,8), (12,7), (12,8), (13,7), (13,8)\}$, then $A =$ _____. Select the correct option

$\{11,12,13\}$

$\{7, 8, 11, 12, 13\}$

$\{7, 8\}$

$\{11,12\}$

10. Prime factorization of 78 is _____. Select the correct option

3×26

6×13

none of these

MTH104 QUIZ 1 2024 SOLVED BY IQRA AZHAR

$$2 \times 3 \times 13$$

11. Prime factorization of 78 is _____. Select the correct option

$$3 \times 26$$

none of these

$$6 \times 13$$

$$2 \times 3 \times 13$$

12. Fundamental theorem of arithmetic is "Every integer $n > 1$ can be expressed uniquely _____. Select the correct option as

a product of composite numbers.

as a product of prime numbers

.as a product of prime and composite numbers.

none

13. Greatest common divisor of 24 and 60 is _____. Select the correct option

$$12$$

$$5$$

$$3$$

$$2$$

14. Let $A = \{1, 2, 4\}$, and let R be a relation on A defined by " x divides y ", written $x|y$. Then _____. Select the correct option

$$R = \{(1, 2), (1, 4), (2, 2), (2, 4), (4, 4)\}$$

None

$$R = \{(1, 1), (1, 2), (1, 4), (2, 2), (2, 4), (4, 4)\}$$

$$R = \{(1, 1), (1, 2), (1, 4), (2, 4)\}$$

15. Least common multiple of 9 and 12 is _____. Select the correct option

$$12$$

MTH104 QUIZ 1 2024 SOLVED BY IQRA AZHAR

36

24

9

16. Find x and y given $(3x, x-y) = (3, 3)$. Select the correct option

$(-1, 2)$

$(1, -2)$

$(1, 2)$

$(-1, -2)$

17. The distance between -2 and 14 on the real line is _____. Select the correct option

14

16

15

-16

18. If p is a prime number and p does not divide a , then $\gcd(p, a) =$ _____. Select the correct option

None

p

a

1

19. Let a and b be real numbers. Then $|a \pm b| \geq ||a| - |b||$. Select the correct option

True

False

20. If p is a prime number and $p \mid a$, then $\gcd(p, a) =$ _____. Select the correct option

$a+p$

p

none

a

MATH ZONE FOR VU