

SSC Exam Questions Organized by Marks

1 MARK

- REAL NUM B ERS: 1.
- REAL NUM B ERS: In sert 4 rat ion al n umb ers betw een
- REAL NUM B ERS: 7
- REAL NUM B ERS: 8
- REAL NUM B ERS: an d 1 w ith ou t us in g
- REAL NUM B ERS: fo rmula
- Ô: Ô
- Ô: >
- Õ: Õ
- Õ: 6
- Õ: (
- Õ:)
- Õ: 2.
- Õ: T he p rime facto ri zat io n o f a n at u ral nu mber(n) is 2
- Õ: 3
- Õ: x^3
- Õ: 2
- Õ: x
- Õ: 5
- Õ: 2
- Õ: x^7 .

- Q: How many consecutive

- Q: zeroes will it have at the end of it? justify your answer. (

- Q:)

- Q: 3.

- Q: Find the value of

- Q: \log

- Q: 5

- Q: 125 (

- Q:)

- Q: 4.

- Q: Write any two irrational numbers

- Q: lying between 3 and 4. (

- Q:)

- Q: 5.

- Q: Find the value of

- H K C: H K C

- H K C: $\frac{3}{4}$

- H K C: 6

- H K C: twx

- H K C: . (

- H K C:)

- H K C: 6.

- H K C: Find the HCF and LCM of 90, 144 by prime factorization method (

- H K C:)

- H K C: 7.
- H K C: Is
- H K C: lo g
- H K C: 3
- H K C: 81 ratio n al o r irrati on al ? Jus ti fy yo ur answ er. (
- H K C:)
- H K C: 8.
- H K C: E xp and
- H K C: lo g
- H K C: 1 0
- H K C: 385 . (
- H K C:)
- H K C: 9.
- H K C: Fi nd th ev al u eo f
- H K C: H K C
- H K C: $\frac{3}{4}$
- H K C: 6
- H K C: s t z
- H K C: . (
- H K C:)
- H K C: 10.
- H K C: Fi nd th eH CFo f 24 and 3 3 by us ing di vis io n
- H K C: alg o rit h m. (
- H K C:)

- H K C: 11.
- H K C: Ramu s ay s ,
- H K C: l og
- H K C: 1 0
- H K C: x
- H K C: = 0, valu e of
- H K C: x
- H K C:)
- H K C: 12.
- H K C: E xp and lo g
- H K C: a
- H K C: 3
- H K C: b
- H K C: 2
- H K C: c
- H K C: 5
- H K C: (
- H K C: Ma y 2022
- H K C:)
- H K C: 13.
- H K C: E xp and
- H K C: lo g
- H K C: 7 6
- H K C: < 5

- H K C: (
- H K C: Aug .
- H K C: 20 22
- H K C:)
- H K C: 14.
- H K C: Express 360 as a product of prime factors .
- H K C: 15.
- H K C: Expand log
- H K C: 6 8 7
- H K C: 7 6
- SE TS: 1.
- SE TS: If $A = \{$
- SE TS: x
- SE TS: :
- SE TS: x
- \mathbb{D} : \mathbb{D}
- \mathbb{N} : \mathbb{N}
- \mathbb{N} : and
- \mathbb{N} : x
- \mathbb{N} : $\{ x < 20 \}$ and $B = \{$
- \mathbb{N} : x
- \mathbb{N} : :
- \mathbb{N} : x
- \mathbb{D} : \mathbb{D}

- D: N and
- D: x
- D: then write the set A
- D: B in the
- D: set builder form. (
- D:)
- D: 2.
- D: 3.
- D: If A
- $B = \{3, 4, 5\}$, $B: B = \{3, 4, 5\}$, B
- $B = \{3, 4, 5\}$, $B: A = \{1, 8, 9\}$ and A
- $B = \{3, 4, 5\}$, $B: \hat{e}$
- $B = \{3, 4, 5\}$, $B: B = \{6, 7\}$, then find A
- $B = \{3, 4, 5\}$, $B: \ddot{e}$
- B. (: B. (
- B. (:)
- B. (: 4.
- B. (: If A =
- D: D
- D: s
- D: á
- Ú: Ú
- Ý: Ý
- Ý: á

- Ú: Ú

- Ú: â

- Ú: á

- Ú: Ú

- Ú: Ú

- Ú: ß

- Ú: á

- Ú: Ú

- Û: Û

- þ: þ

- E: E

- E: ,

- E: t h e n w r i t e

- E: A l n

- E: s e t b u i l d e r f o r m. (

- E:)

- E: 5.

- A ={: A ={:

- A ={: x

- A ={: :

- A ={: x

- Ð: Ð

- N ,: N ,

- N ,: x

- N, : is a composite number
- N, : and
- N, : x
- N, : < 13 }. Write set A in the roster form.(
- N, :)
- N, : 6.
- N, : If $A = \{1, 2, 3, 4, 5\}$,
- B: B
- B: $= \{3, 4, 5, 6\}$, Find A
- B: \hat{e}
- B. (\therefore B. (
- B. (\therefore)
- B. (\therefore 7.
- B. (\therefore Represent A
- B. (\therefore \hat{e}
- B. (\therefore B thorough
- B. (\therefore Ven n
- B. (\therefore diagram, Where $A = \{1, 4, 6, 9, 10\}$ and
- B =: B =
- B =: $\{x$
- B =: /
- B =: x
- B =: is a
- B =: perfect square

- B =: l e s s t h a n 25 } . (
- B =:)
- B =: 8.
- B =: G i v e o n e e x a m p l e e a c h f o r a f i n i t e s e t a n d a n i n f i n i t e s e t . (
- B =:)
- B =: 9.
- B =: L i s t a l l t h e s u b s e t s o f t h e s e t A = {
- B =: x
- B =: ,
- B =: y
- B =: ,
- B =: z
- B =: } (
- B =:)
- B =: (
- B =:)
- R E A L N U M B E R S / S E T S : R E A L N U M B E R S / S E T S
- R E A L N U M B E R S / S E T S : (
- R E A L N U M B E R S / S E T S : 23
- R E A L N U M B E R S / S E T S :)
- R E A L N U M B E R S / S E T S : M a r c h 2015 t o
- R E A L N U M B E R S / S E T S : r t
- R E A L N U M B E R S / S E T S : 4
- R E A L N U M B E R S / S E T S : t

- J: J
- UN E: UN E
- UN E: itrt
- UN E: 4
- UN E: 10.
- UN E: If $A = \{$
- UN E: x
- UN E: :
- UN E: x
- UN E: is a factor of 24 }, then find
- UN E: n
- (A). (: (A). (
- (A). (:)
- (A). (: 11.
- (A). (: If $A = \{1, 2, 3\}$,
- $B = \{3, 4, 5\}$: $B = \{3, 4, 5\}$
- $B = \{3, 4, 5\}$: Then find A
- $B = \{3, 4, 5\}$: B and B
- A: A
- A: (
- A:)
- A: 12.
- $A = \{$: $A = \{$
- $A = \{$: x

- A = { : :

- A = { : x

- A = { : is a factor of 8 }, B = {

- A = { : x

- A = { : :

- A = { : x

- A = { : is a factor of 36

- A = { : }

- A = { : . Is A

- A = { : ,

- A = { : B? Justify

- A = { : . (

- A = { :)

- D.: 1.

- D.: For what value of k, the following system of equations has a unique solution.

- D.: x

- D.: ky

- D.: = 2

- D.: and 3

- D.: x

- D.: + 2

- D.: y

- D.: =

- D.: 5 (

- D.:)
- D.: 2.
- D.: For what values of
- D.: m
- D.: ,
- D.: the pair of
- D.: equations
- D.: x
- D.: + my = 10 and 9
- D.: x
- D.: + 12
- D.: y
- D.: = 30 have unique
- D.: solution . (
- D.:)
- D.: 3.
- D.: In a right angled triangle ABC, AB =
- D.: x
- D.: +
- D.: y
- ,BC =: ,BC =
- ,BC =: x
- ,BC =: y
- ,BC =: ,CD = 9 and AD = 3 . Find the values of

- ,BC =: x

- ,BC =: and

- ,BC =: y

- ,BC =: .

- ,BC =: (

- ,BC =:)

- ,BC =: 4.

- ,BC =: Sh ow t h at th ep ai r Lin earE qu ati on s 7

- ,BC =: x

- ,BC =: +

- ,BC =: y

- ,BC =: = 10 and

- ,BC =: x

- ,BC =: + 7

- ,BC =: y

- ,BC =: =10 arecon sul t ant . (

- ,BC =:)

- ,BC =: 5.

- ,BC =: Wri t et he Cond it ion fo r th ep air ofl in ear eq uati on s in two vari ab l es to b e parall el

- ,BC =: lines .(

- ,BC =:)

- ,BC =: 6.

- ,BC =: If

- ,BC =: x

- ,BC =: =
- ,BC =: a
- ,BC =: an d
- ,BC =: y
- ,BC =: =
- ,BC =: b
- ,BC =: is so lu tio n fo rt h ep ai r of equati ons
- ,BC =: x
- ,BC =: y
- ,BC =: = 2 an d
- ,BC =: x
- ,BC =: +
- ,BC =: y
- ,BC =: =4 ,
- ,BC =: th en find th e
- ,BC =: v alu es of
- ,BC =: a
- ,BC =: an d
- ,BC =: b
- ,BC =: . (
- ,BC =:)
- ,BC =: 7.
- ,BC =: Wh eth ert he
- ,BC =: fol low ing pai ro f

- ,BC =: Linear Equations are parallel? Justify .

- ,BC =: 6

- ,BC =: x

- ,BC =: 4

- ,BC =: y

- ,BC =: + 10 =

- ,BC =: 0 , 3

- ,BC =: x

- ,BC =: 2

- ,BC =: y

- ,BC =: + 6 = 0 . (

- ,BC =:)

- ,BC =: 8.

- ,BC =: t

- ,BC =: x

- ,BC =: ty

- ,BC =: = 5 and

- ,BC =: 3

- ,BC =: x

- ,BC =: + 2

- ,BC =: y

- ,BC =: = 11 . (

- ,BC =:)

- ,BC =: 9.

- ,BC =: The solution of the linear equation

- ,BC =: x

- ,BC =: +

- ,BC =: y

- ,BC =: =5 are (1,4),(2,3) and (3,2). The solution of

- ,BC =: another linear equation

- ,BC =: x

- ,BC =: y

- ,BC =: =1 are (3,2),(2,1) and (5,4). Plot these points on graph sheet

- ,BC =: and draw lines.

- ,BC =: (

- ,BC =: May 2022

- ,BC =:)

- ,BC =: 10.

- ,BC =: The solutions of the linear equation $x + y = 8$ are (

- ,BC =: 0

- ,BC =: ,8), (2,6) and (3,5). The solutions of

- ,BC =: another linear equation $3x + 3y = 12$ are (1,3),(3,1) and (9,4). Plot these points on graph

- ,BC =: sheet and draw lines.

- POLYNOMIALS / POLYNOMIALS /

- PAIR OF LINEAR EQUATIONS: PAIR OF LINEAR EQUATIONS

- PAIR OF LINEAR EQUATIONS: (

- PAIR OF LINEAR EQUATIONS: 23

- PAIR OF LINEAR EQUATIONS:)

- X: X

- X: I

- X: X

- Y: Y

- Y: I

- Y: Y

- O: O

- O: March 2015 to

- O: r t

- O: 4

- O: t

- J: J

- J: 202

- J: 4

- J: 11.

- J: If the pair of linear equations 6

- J: x

- J: 4

- J: y

- J: $+10 = 0$ and 3

- J: x

- J: +

- J: ky

- J: $+6 = 0$ represent s parallel lines

- J: k

- J: . (

- J:)

- J: 12.

- J: Is the pair of linear equations 3

- J: x

- J: -

- J: 5

- J: y

- J: =7 and 6

- J: x

- J: -

- J: 10

- J: y

- J: =13 are inconsistent? Justify your

- J: answer.

- J: 13.

- J: Whether the following pair of linear

- J: equations represents parallel lines? Justify your answer.

- J: 2

- J: x

- J: + 3

- J: y

- J: = 10 and 6

- J: x
- J: $+ 9$
- J: y
- J: $= 15$.
- QUADRATIC EQUATIONS: 1.
- QUADRATIC EQUATIONS: Check whether 1 and
- QUADRATIC EQUATIONS: 7
- QUADRATIC EQUATIONS: 6
- QUADRATIC EQUATIONS: are the roots of the equation 2
- QUADRATIC EQUATIONS: x
- QUADRATIC EQUATIONS: 2
- QUADRATIC EQUATIONS: 5
- QUADRATIC EQUATIONS: x
- QUADRATIC EQUATIONS: $+ 3 = 0$. (
- QUADRATIC EQUATIONS:)
- QUADRATIC EQUATIONS: 2.
- QUADRATIC EQUATIONS: If
- QUADRATIC EQUATIONS: b
- QUADRATIC EQUATIONS: 2
- QUADRATIC EQUATIONS: $4ac > 0$ in
- QUADRATIC EQUATIONS: ax
- QUADRATIC EQUATIONS: 2
- QUADRATIC EQUATIONS: $+$
- QUADRATIC EQUATIONS: bx

- QUADRATIC EQUATIONS: +
- QUADRATIC EQUATIONS: c
- QUADRATIC EQUATIONS: 3.
- QUADRATIC EQUATIONS: Find the value of
- QUADRATIC EQUATIONS: k
- QUADRATIC EQUATIONS: ,if 2 is one of the roots of the quadratic equation
- QUADRATIC EQUATIONS: x
- QUADRATIC EQUATIONS: 2
- QUADRATIC EQUATIONS: kx
- QUADRATIC EQUATIONS: $+6 = 0$ (
- QUADRATIC EQUATIONS:)
- QUADRATIC EQUATIONS: 4.
- QUADRATIC EQUATIONS: Write the nature of roots of the quadratic equation 2
- QUADRATIC EQUATIONS: x
- QUADRATIC EQUATIONS: 2
- QUADRATIC EQUATIONS: 5
- QUADRATIC EQUATIONS: x
- QUADRATIC EQUATIONS: $+6 = 0$
- QUADRATIC EQUATIONS: (
- QUADRATIC EQUATIONS:)
- QUADRATIC EQUATIONS: 5.
- QUADRATIC EQUATIONS: Write the nature of the roots of the quadratic equation
- QUADRATIC EQUATIONS: x
- QUADRATIC EQUATIONS: 2

- QUADRATIC EQUATIONS: 8
- QUADRATIC EQUATIONS: x
- QUADRATIC EQUATIONS: $+16 = 0$. (
- QUADRATIC EQUATIONS:)
- QUADRATIC EQUATIONS: 6.
- QUADRATIC EQUATIONS: Find sum and product of the roots of the quadratic equation
- QUADRATIC EQUATIONS: x
- QUADRATIC EQUATIONS: 2
- QUADRATIC EQUATIONS: 4
- QUADRATIC EQUATIONS: $\frac{3}{4}$
- QUADRATIC EQUATIONS: u
- QUADRATIC EQUATIONS: x
- QUADRATIC EQUATIONS: $+9 = 0$. (
- QUADRATIC EQUATIONS:)
- QUADRATIC EQUATIONS: 7.
- QUADRATIC EQUATIONS: Find the values of
- QUADRATIC EQUATIONS: k
- QUADRATIC EQUATIONS: for which the quadratic equation 4
- QUADRATIC EQUATIONS: x
- QUADRATIC EQUATIONS: 2
- QUADRATIC EQUATIONS: + 5
- QUADRATIC EQUATIONS: kx
- QUADRATIC EQUATIONS: $+25 = 0$
- QUADRATIC EQUATIONS: has equal

- QUADRATIC EQUATIONS: roots .(
- QUADRATIC EQUATIONS:)
- QUADRATIC EQUATIONS: 8.
- QUADRATIC EQUATIONS: Find the roots of the quadratic equation
- QUADRATIC EQUATIONS: x
- QUADRATIC EQUATIONS: 2
- QUADRATIC EQUATIONS: + 2
- QUADRATIC EQUATIONS: x
- QUADRATIC EQUATIONS: $3 = 0$. (
- QUADRATIC EQUATIONS:)
- QUADRATIC EQUATIONS: 9.
- QUADRATIC EQUATIONS: Find the discriminant of the quadratic equation 3
- QUADRATIC EQUATIONS: x
- QUADRATIC EQUATIONS: 2
- QUADRATIC EQUATIONS: 5
- QUADRATIC EQUATIONS: x
- QUADRATIC EQUATIONS: $+2 = 0$ and hence write the nature of
- QUADRATIC EQUATIONS: its roots .
- QUADRATIC EQUATIONS: (
- QUADRATIC EQUATIONS:)
- QUADRATIC EQUATIONS: 10.
- QUADRATIC EQUATIONS: Is (
- QUADRATIC EQUATIONS: x
- QUADRATIC EQUATIONS: + 2)

- QUADRATIC EQUATIONS: 2
- QUADRATIC EQUATIONS: =
- QUADRATIC EQUATIONS: x
- QUADRATIC EQUATIONS: 2
- QUADRATIC EQUATIONS: + 3 a Quadratic equation? Justify.
- QUADRATIC EQUATIONS: (
- QUADRATIC EQUATIONS: May 2022
- QUADRATIC EQUATIONS:)
- QUADRATIC EQUATIONS: 11.
- QUADRATIC EQUATIONS: Is
- QUADRATIC EQUATIONS: x
- QUADRATIC EQUATIONS: (2
- QUADRATIC EQUATIONS: x
- QUADRATIC EQUATIONS: + 3) =
- QUADRATIC EQUATIONS: x
- QUADRATIC EQUATIONS: 2
- QUADRATIC EQUATIONS: + 5 is a Quadratic equation? Justify
- QUADRATIC EQUATIONS: (
- QUADRATIC EQUATIONS: Aug
- QUADRATIC EQUATIONS: 2022
- QUADRATIC EQUATIONS:)
- QUADRATIC EQUATIONS: 12.
- QUADRATIC EQUATIONS: Solve the quadratic equation 2 sin
- QUADRATIC EQUATIONS: 2

- QUAD RATIC EQUATIONS: 13.
- QUAD RATIC EQUATIONS: Construct a Quadratic equation having the roots
- QUAD RATIC EQUATIONS: log
- QUAD RATIC EQUATIONS: 2
- QUAD RATIC EQUATIONS: 8 and
- QUAD RATIC EQUATIONS: log
- QUAD RATIC EQUATIONS: 10
- QUAD RATIC EQUATIONS: 100
- QUAD RATIC EQUATIONS: 14.
- QUAD RATIC EQUATIONS: Construct a Quadratic equation having the roots
- QUAD RATIC EQUATIONS: log
- QUAD RATIC EQUATIONS: 2
- QUAD RATIC EQUATIONS: 8 and $\csc 30^\circ$.
- PROGRESSIONS: 1.
- PROGRESSIONS: The
- PROGRESSIONS: hand
- PROGRESSIONS: -
- PROGRESSIONS: borewell dealer charges Rs 200 /
- PROGRESSIONS: -
- PROGRESSIONS: for the first one
- PROGRESSIONS: meter
- PROGRESSIONS: only and raises drilling
- PROGRESSIONS: charges at the rate of rupees 30 /
- PROGRESSIONS: -

- PROG RESS IONS: fo r ev ery s ubs equ ent
- PROG RESS IONS: meter
- PROG RESS IONS: .
- PROG RESS IONS: Wri te a
- PROG RESS IONS: p rog ressi on fo r
- PROG RESS IONS: t h e
- PROG RESS IONS: abo v ed at a.(
- PROG RESS IONS:)
- PROG RESS IONS: 2.
- PROG RESS IONS: Wri t et he commo n d ifferen ce of anA ri th met ic Prog ress io n ,wh os e
- PROG RESS IONS: n
- PROG RESS IONS: th
- PROG RESS IONS: term
- PROG RESS IONS: is giv en by
- PROG RESS IONS: t
- PROG RESS IONS: n
- PROG RESS IONS: $=3n + 7$. (
- PROG RESS IONS:)
- PROG RESS IONS: 3.
- PROG RESS IONS: Fi nd th e
- PROG RESS IONS: s um of fi rs t 2 00 natu ral nu mb ers . (
- PROG RESS IONS:)
- PROG RESS IONS: 4.
- PROG RESS IONS:)

- PROGRESSIONS: 5.
- PROGRESSIONS: In a G.P. t
- PROGRESSIONS: n
- PROGRESSIONS: =
- PROGRESSIONS: (
- PROGRESSIONS: 1)
- PROGRESSIONS: n.
- PROGRESSIONS: 20 17 .Find the common ratio . (
- PROGRESSIONS:)
- PROGRESSIONS: 6.
- PROGRESSIONS: The nth term of A.P is 6
- PROGRESSIONS: n
- PROGRESSIONS: +2 .Find the common difference (
- PROGRESSIONS: n
- N) (: N) (
- N) (:)
- N) (: 7.
- N) (: The sequence
- N) (: $\frac{3}{4}$
- N) (: u
- N) (: ,
- N) (: $\frac{3}{4}$
- N) (: x
- N) (: ,

- N) ($\frac{3}{4}$
- N) ($\{$
- N) ($,$
- N) ($\frac{3}{4}$
- N) ($s t$
- N) ($, \dots$
- N) (form an Arithmetic Progression ? Give reason .
- N) (8.
- N) (For the A.P. :
- N) (3 ,
- N) (7 ,
- N) (11 ,.
- N) (.... . ; can we find directly
- N) (a
- N) (30
- N) (-
- N) (a
- N) (20
- N) (without actually finding
- N) (a
- N) (30
- N) (and
- N) (a
- N) (20

- N) (: . (
- N) (:)
- N) (: 9.
- N) (: reason .(
- N) (:)
- N) (: 10.
- N) (: Find the 11
- N) (: th
- N) (: term of the A.P.: 15 ,12 ,9 ,.....
- N) (: (
- N) (:)
- N) (: 11.
- N) (: Find the 10
- N) (: th
- N) (: term of the arithmetic progression 3, 5,7 ,.....
- N) (: (
- N) (: May 2022
- N) (:)
- N) (: 12.
- N) (: Find the 10
- N) (: th
- N) (: term of an arithmetic progression 5, 9,13 ,.....
- N) (: (
- N) (: June

- N) (: 20 22

- N) (:)

- COORDINATE GEOMETRY: 1.

- COORDINATE GEOMETRY: Find the centroid of a triangle,

- COORDINATE GEOMETRY: whose

- COORDINATE GEOMETRY: vertices are (3,4), (

- COORDINATE GEOMETRY: 7 ,

- COORDINATE GEOMETRY: 2) and (10 ,

- COORDINATE GEOMETRY: 5). (

- COORDINATE GEOMETRY:)

- COORDINATE GEOMETRY: 2.

- COORDINATE GEOMETRY: Find the distance between the points (0,0) and (

- COORDINATE GEOMETRY: a

- COORDINATE GEOMETRY: ,

- COORDINATE GEOMETRY: b

- COORDINATE GEOMETRY:). (

- COORDINATE GEOMETRY:)

- COORDINATE GEOMETRY: 3.

- COORDINATE GEOMETRY: Find the midpoint of the line segment joining the points (

- COORDINATE GEOMETRY: 5,5) and (5,

- COORDINATE GEOMETRY: 5). (

- COORDINATE GEOMETRY:)

- COORDINATE GEOMETRY: 4.

- COORDINATE GEOMETRY: If the slope of the line passing through the two

- COORDINATE GEOMETRY: points (
- COORDINATE GEOMETRY: 2,5) and (5, 8) is represented by t an
- E: E
- E: ;
- E: (where 0
- E: 0
- E: <
- E: E
- E: <90
- E: 0
- E: E
- E:)
- E: 5.
- A (0,3), B(A (0,3), B(
- A (0,3), B(k
- A (0,3), B(: 0) and $AB = 5$. Find the positive value of
- A (0,3), B(k
- A (0,3), B(: (
- A (0,3), B(:)
- A (0,3), B(: 6.
- A (0,3), B(: Find the distance between the points (1,5) and (5,8). (
- A (0,3), B(:)
- A (0,3), B(: 7.
- A (0,3), B(: What is the other end of the

- A (0,3),B(point of the diameter is (3,4))? (
- A (0,3),B()
- A (0,3),B(8.
- A (0,3),B(Find the centroid of
- A (0,3),B(PQR, when vertices are P(1,1),Q (2,2),R(
- A (0,3),B(t
- A (0,3),B(3 ,
- A (0,3),B(t
- A (0,3),B(3).(
- A (0,3),B()
- A (0,3),B(9.
- A (0,3),B(x
- A (0,3),B(2,4) and B(
- A (0,3),B(x
- A (0,3),B(,
- A (0,3),B(2). (
- A (0,3),B()
- A (0,3),B(10.
- A (0,3),B(o
- A (0,3),B(90
- A (0,3),B(o
- A (0,3),B().
- A (0,3),B((
- A (0,3),B(May 2022

- A (0,3),B(:)
- A (0,3),B(: 11.
- A (0,3),B(: Find the distance between the points (sec
- A (0,3),B(: ;
- A (0,3),B(: and (0,tan
- E: E
- E:) when
- E: E
- E: = 45 °
- E: (
- E: Aug .22
- E:)
- E: 12.
- E: Find the centroid of the triangle whose vertices are (2,3),(
- E: 4,7) and (2,
- E: 4).
- E: (
- A: A
- A: pr
- A: .2
- A: 3
- A:)
- PROGRESSIONS /: PROGRESSIONS /
- COORDINATE GEOMETRY: COORDINATE GEOMETRY

- CO O RD INAT E G EO ME TRY: (
- CO O RD INAT E G EO ME TRY: A ug .22
- CO O RD INAT E G EO ME TRY:)
- CO O RD INAT E G EO ME TRY: M arch 201 5 to
- CO O RD INAT E G EO ME TRY: r t
- CO O RD INAT E G EO ME TRY: 4
- CO O RD INAT E G EO ME TRY: t
- JUN E: JUN E
- JUN E: ĩ t r t
- JUN E: 4
- SIM ILAR TR IANG LES: 1.
- SIM ILAR TR IANG LES: In a
- SIM ILAR TR IANG LES: ĩ
- SIM ILAR TR IANG LES: DE F; A ,B and C areth e mi d
- SIM ILAR TR IANG LES: -
- SIM ILAR TR IANG LES: po in ts o f EF, FD an d DE resp ect iv el y .lft he area o f
- SIM ILAR TR IANG LES: ĩ
- SIM ILAR TR IANG LES: DE F is 1 4 .4 cm
- SIM ILAR TR IANG LES: 2
- SIM ILAR TR IANG LES: ,th en find th e area o f
- SIM ILAR TR IANG LES: ĩ
- ABC.: ABC.
- ABC.: (
- ABC.:)

- ABC.: 2.

- ABC.: and

- ABC.: ,i t i sgi ven that

- PQ R: PQ R

- PQ R: ý

- XY Z: XY Z

- Y +: Y +

- Y +: á

- Z =: Z =

- Z =: 90

- Z =: 0

- Z =: and

- X Y : XZ: X Y : XZ

- X Y : XZ: = 3 : 4. Then findt h e rati o of si desi n

- PQR: PQR

- PQR: .

- PQR: (

- PQR:)

- PQR: 3.

- PQR: ý

- ADE ,: ADE ,

- ADE ,: x

- ADE ,:)

- ADE ,: 4.

- ADE ,: It is given that
- ADE ,: \angle
- ABC: ABC
- ABC: \angle
- ABC: DEF is it true to say that
- ABC: $\gg \frac{1}{4}$
- ABC: $\frac{1}{2} \frac{3}{4}$
- L: L
- L: $^0 \gg$
- L: $\frac{3}{4} \angle$
- L: ? Justify your answer.(
- L:)
- L: 5.
- L: Draw the diagram corresponding to basic proportionality theorem.(
- L:)
- L: 6.
- L: Srivani walks 12 m due to East and turns left and walks another 5 m, how far is she from
- L: the places he
- L: started?
- L: (
- L:)
- L: 7.
- L: Write the similarity criterion by which
- L: the given

- L: pair of triangles are similar (
- L:)
- L: 8.
- L: Madhav is aid
- L: answer.
- L: (
- L:)
- L: 9.
- L: Draw a line segment of length 7.3 cm and divide it in the
- L: ratio 3
- L: : 4.
- L: (
- L:)
- L: 10.
- L: In the given figure, ABC is a triangle.
- L: AD = 3 cm, DB = 5 cm, AE = 6 cm and
- L: EC = 10 cm. Is DE
- A: A
- A: BC? Justify .
- A: (May
- A: 22
- A:)
- A: 11.
- A: The sides of a triangle measure 2

- A: $\frac{3}{4}$

- A: t

- A: ,4 and 2

- A: $\frac{3}{4}$

- A: x

- A: units .Is it aright

- A: -

- A: angled triangle? Justify .

- D.: 1.

- D.: How many tangents can be drawn to a circle from a point on the same circle? justify your

- D.: answer. (

- D.:)

- D.: 2.

- D.: Find the length of the tangent from a point , which is 9.1

- D.: cm

- D.: away from the center of the circle,

- D.: whose radius is 8.4

- D.: cm

- D.: . (

- D.:)

- D.: 3.

- D.:)

- D.: 4.

- D.: The length of the minute hand of a clock is 3.5 cm. Find the area swept by minute

hand in 30

- D.: minutes. (use

- D.: è

- L: L

- L: 6 6

- L: ;

- L:) (

- L:)

- L: 5.

- L: The length of the tangent to a circle from a point 17 cm from its Centre is 18 cm. Find the

- L: radius of the circle. (

- L:)

- L: 6.

- L: Find the length of the tangent to a circle from a point 13 cm away from the centre of the circle

- L: radius 5 cm.

- L: (

- L:)

- L: 7.

- L: A point P is 25 cm from the centre O of the circle. The length of the tangent

- L: drawn from P to

- L: the circle is 24 cm. Find the radius of the circle. (

- L:)

- L: 8.

- L: In the given figure, O is the centre of a circle, OQ is
- L: the radius and $OQ = 5$ cm. The length of the tangent
- L: drawn from external point P to the circle $PQ = 12$ cm,
- L: (
- L: May 20 22
- L:)
- L: 9.
- L: A circle is inscribed in
- L:
- L: A triangle touching the sides AB, BC and CA
- L: at points D, E and F respectively. If $AD = 3$ cm,
- L: $BE = 4$ cm
- L: and
- L: $CF = 5$ cm, then find the perimeter of the triangle.
- L: 10.
- L: A strip of width 4 cm is attached to one side of a square to
- L: form a rectangle. The area of the rectangle formed is 77
- L: cm
- L: 2
- L: ,
- L: then find the length of the side of the square.
- SIMILAR TRIANGLES / : SIMILAR TRIANGLES /
- TANGENTS AND SECANTS TO THE CIRCLE: TANGENTS AND SECANTS TO THE CIRCLE
- Q: Q

- P: P

- O: O

- A: A

- D: D

- B: B

- E: E

- C: C

- F: F

- F: 4

- F: cm

- A: A

- D: D

- D: d

- E: E

- C: C

- C: d

- B: B

- B: d

- B: M arch 201 5 to

- B: r t

- B: 4

- B: t

- JUN E: JUN E

- JUN E: ĩ t r t

- JUN E: 4

- JUN E: 11.

- JUN E: A O B i s t h e d i a m e t e r o f a c i r c l e w i t h c e n t r e 'O' a n d

- JUN E: A C i s t a n g e n t t o t h e c i r c l e a t A. I f

- B O C = 130: B O C = 130

- B O C = 130: t h e n f i n d

- A C O .: A C O .

- A C O .: .

- A C O .: 12.

- A C O .: I n t h e g i v e n f i g u r e, P Q a n d P R a r e t a n g e n t s t o a c i r c l e

- A C O .: w i t h c e n t r e 'O'. I f

- Q O R = 120: Q O R = 120

- Q O R = 120: , t h e n f i n d t h e

- R P O .: R P O .

- R P O .: .

- R P O .: 2

- R P O .: M A R K S

- R P O .: 1.

- R P O .: (

- R P O .:)

- R P O .: 2.

- R P O .: F r o m a n e x t e r n a l p o i n t , t w o t a n g e n t s a r e d r a w n t o a c i r c l e . A l i n e j o i n i n g t h e e x t e r n a l p o i n t a n d

- R P O .: t h e c e n t r e o f t h e c i r c l e b i s e c t s t h e a n g l e b e t w e e n t h e t a n g e n t s . I s t h i s t r u e ? J u s t i f y y o u r a n s w e r .

- RPO ∴ 3.

- RPO ∴ A B is a chord of the circle and A O C is its diameter, such that

- RPO ∴ \hat{A}

- A C B = 60: A C B = 60

- A C B = 60: 0

- A C B = 60: .If A T is the

- A C B = 60: tangent to the circle at the point A, then find the measure of

- A C B = 60: \hat{A}

- B A T ∴ B A T .

- B A T ∴ (

- B A T ∴)

- B A T ∴ 4.

- B A T ∴ Draw a circle with 5 cm radius and

- B A T ∴ construct a pair of tangents to the circle

- B A T ∴ .

- B A T ∴ (

- B A T ∴)

- B A T ∴ 5.

- B A T ∴ Find the area of the shaded region in the

- B A T ∴ given figure.

- B A T ∴ A B C D is a square up side 10.5 cm.(

- B A T ∴)

- B A T ∴ 6.

- B A T ∴ A circle of radius 3 cm is inscribed in a

- BA T ∴ A BC and AF = 5 cm BF= 3 cm as
- BA T ∴ s h o wn in th e figu re.
- BA T ∴ Somu
- BA T ∴ s ai d t hat
- BA T ∴ the
- BA T ∴ measu re o f th e sid e AC
- BA T ∴ is 17 cm.
- BA T ∴ Do
- BA T ∴ y ou are ag ree ?G iv e reason s .
- BA T ∴ (
- BA T ∴)
- BA T ∴ 7.
- BA T ∴ In th e g iv en figu re,TA and T B are t an g en ts to
- BA T ∴ á
- A TB =80: A TB =80
- A TB =80: 0
- A TB =80: ,
- A TB =80: t h en fi nd th e measu re of
- A TB =80: á
- A BT ∴(A BT ∴(
- A BT ∴()
- A BT ∴(8.
- A BT ∴(In th e g iv en figu reAB,
- A BT ∴(A C and PQ are t an g en ts to a

- A BT .(: ci rcl e and $AB = 6$ cm.Fin d th e peri met ero f

- A PQ: A PQ

- A PQ: (

- A PQ:)

- A PQ: 4

- A PQ: /6

- A PQ: MARKS

- A PQ: 1.

- A PQ: D raw aci rcle wi th rad ius 3cm and co ns truct apai ro f tang en ts fro m ap oi nt 8 cm aw ay from th e

- A PQ: cent re. (

- A PQ:)

- A PQ: 2.

- A PQ: D raw aci rcle of radiu s 5 cm.fro m ap oin t 8 cm aw ay fro m it s cen t re,con st ru ct ap ai ro f

- A PQ: t ang ent s t o t he circl e. Find th el engt hs of tan gent s .(

- A PQ:)

- A: A

- B: B

- C: C

- D: D

- D: 10.5 cm

- B: B

- A: A

- O: O

- T: T

- P: P

- B: B

- A: A

- C: C

- X: X

- Q: Q

- A: A

- B: B

- F: F

- F: 5 cm

- F: 3 cm

- C: C

- SECAN TS: SECAN TS

- A ND: A ND

- TA NG EN T S TO TH E C IRC LE: TA NG EN T S TO TH E C IRC LE

- TA NG EN T S TO TH E C IRC LE: 1 30

- A: A

- O: O

- B: B

- C: C

- Q: Q

- R: R

- O: O

- P: P

- P: (

- J: J

- J: 5

- J:)

- J: March 2015 to

- J: r t

- J: 4

- J: t

- JUN E: JUN E

- JUN E: i t r t

- JUN E: 4

- JUN E: 3.

- JUN E: Two concentric circles of radii 10cm and 6cm are drawn. Find the length of the chord of the

- JUN E: Larger circle which touches the smaller circle. ((

- JUN E:)

- JUN E: 4.

- JUN E: Draw a circle of diameter 6 cm from a point 5 cm away from its centre. Construct the pair of

- JUN E: tangents to the circle and measure their length. (

- JUN E:)

- JUN E: 5.

- JUN E: Ten identical

- JUN E: mementos is made by my school to awarding

- JUN E: 10 student s fi rs t p rize win ners i n g ames if each mango is mad e

- JUN E: as

- JUN E: s h ow n in figu re (s h ad ed p o rt ion) it s b ase PQRS is si lv er

- JUN E: p l at ed from th e fro nt sid e at th e rat e of

- JUN E: Rs .20 /

- JUN E: -

- JUN E: p er cm

- JUN E: 2

- JUN E: .

- JUN E: Fi n d th e tot al cos t o f th es il ver

- JUN E: pl at ing of 10 Men tos .

- JUN E: (O R=5 cm.,RQ = 6 cm,PS= 8 cm).(

- JUN E:)

- JUN E: 6.

- JUN E: D raw two con cent ric cir cl es of radi i 1 .5 cm

- JUN E: an d 4 cm. Fro m apo in t 10 cmfro m its cen tre,

- JUN E: con st ru ct t he pai ro f tang ent to th e ci rcl e. (

- JUN E:)

- JUN E: 7.

- A: A

- A: sq uareO DE F

- A: i s i ns cri b ed in aq uad rant O PE Q

- A: o f circle and O D =1 4

- A: $\frac{3}{4}$

- A: t

- A: cm. A art hi s aid th at

- A: 2

- A: Do

- A: y ou ag ree ?G ive reason .

- A: (

- A:)

- A: 8.

- A: D raw aci rcle of radiu s 6 cm an d con st ru ct two t ang en ts to th e ci rcl e so th at angl e betw een th e

- A: t ang ent s i s 60° .

- A: (

- A:)

- A: 9.

- A: t ang ent s t o th e circl e.

- A: (

- A: Ma y 2022

- A:)

- A: 10.

- A: D raw aci rcle of radiu s 4 cm. Fro m apoi nt 9 cm aw ay fro m it 's cent re, co ns tru ct ap ai r of

- A: t ang ent s t o th e circl e.

- A: (

- A: A ug .22

- A:)

- A: 11.

- A: Construct a circle of radius 5 cm. Then construct a pair of tangents to the circle such that the

- A: angle between them is 60° , (

- A:)

- A: Part

- A: -

- A: b

- A: 1.

- A: The number of pairs of tangents can be drawn to a circle, which are parallel to each other, are

- A.: A.

- A.: 0

- B.: B.

- B.: 2

- C.: C.

- C.: 4

- D.: D.

- D.: Infinite

- D.: (

- D.:)

- D.: 2.

- D.: (

- D.:)

- A.: A.

- A.: 0
- B.: B.
- B.: 3
- C.: C.
- C.: 2
- D.: D.
- D.: 1
- D.: 3.
- D.: O bs erv et he fol low ing .
- (I): (I)
- (I): T he max i mu mn umber of tang en ts draw n fro m an ex t ern al p oi nt to aci rcl eis 2.
- (II): (II)
- (II): T he max i mu mn umber of secan ts drawn fro m an ext ern al po int t o aci rcl e is 2 .
- (II): Wh i ch on eo f th e fol lo win g i s no t tru e? (
- (II):)
- A.: A.
- A.: (I) on ly
- B.: B.
- B.: (II) on ly
- C.: C.
- C.: Bo th (I)and (II)
- D.: D.
- D.: N ei th er (I)no r (II)
- D.: 4.

- D.: The length of the tangent point P is 12 cm and the radius of the circle is 5cm, then the

- D.: distance from point P to the center of the circle is

- D.: (

- D.:)

- A.: A.

- A.: 11 cm

- B.: B.

- B.: 10 cm

- C.: C.

- C.: 13 cm

- D.: D.

- D.: 14 cm

- O: O

- P: P

- E: E

- F: F

- D: D

- Q: Q

- P: P

- Q: Q

- R: R

- O: O

- S: S

- SECANTS: SECANTS

- A ND: A ND
- TA NG EN T S: TA NG EN T S
- TO TH E C IRC LE: TO TH E C IRC LE
- TO TH E C IRC LE: M arch 201 5 to
- TO TH E C IRC LE: r t
- TO TH E C IRC LE: 4
- TO TH E C IRC LE: t
- JUN E: JUN E
- JUN E: ĩ t r t
- JUN E: 4
- JUN E: 5.
- JUN E: Fro mt h e adj acent figu re
- A PB= 40: A PB= 40
- A PB= 40: 0
- A PB= 40: ,th en
- AO B =: AO B =
- AO B =:
- AO B =: (
- AO B =:)
- A.: A.
- A.: 1 10
- A.: 0
- B.: B.
- B.: 1 40

- B.: 0

- C.: C.

- C.: 80

- C.: 0

- D.: D.

- D.: 1 60

- D.: 0

- D.: 6.

- D.: If

- D.: # 2

- D.: \$

- D.: \$

- D.: \$

- D.: \$

- D.: an d

- D.: # 3

- D.: \$

- D.: \$

- D.: \$

- D.: \$

- D.: are t an gent s t o aci rcl ew it h Cent re O, su ch th at

- PO Q =10 5: PO Q =10 5

- PO Q =10 5: 0

- PO Q =10 5: ,th en

- PA Q =: PA Q =

- A.: A.

- A.: 1 05

- A.: 0

- B.: B.

- B.: 90

- B.: 0

- C.: C.

- C.: 75

- C.: 0

- D.: D.

- D.: 65

- D.: 0

- D.: 7.

- D.: # \$

- D.: \$

- D.: \$

- D.: \$

- D.: \$

- D.: i s at an g ent drawn to a cir cl ew it h Cent reO fro m anext ern al po in t A an d Bi s apo in t o f

- D.: con t act ,th en whi ch of th e fol low ing is alway s t ru e? (

- D.:)

- D.: (i)

- O A > OB: O A > OB

- O A > OB: (i i)
- O A > AB: O A > AB
- O A > AB: (i ii)
- A B > O B: A B > O B
- A.: A.
- A.: o nly (i)
- B.: B.
- B.: o nly (ii)
- C.: C.
- C.: (i i)and (iii)
- D.: D.
- D.: (i) an d
- D.: (i i)
- D.: 8.
- D.: N umber of s ecant s t hat can be d rawn to circl e th rou gh apoi nt ins id e it is (
- D.:)
- A.: A.
- A.: 0
- B.: B.
- B.: 1
- C.: C.
- C.: 2
- D.: D.
- D.: In fi ni te

- D.: 9.

- D.: Fro m t h egi v e n f i g u r e

- $XOY = 130^\circ$: $XOY = 130^\circ$

- $XOY = 130^\circ$: 0

- $XOY = 130^\circ$: ,th en

- $XPO = \dots$: $XPO = \dots$

- $XPO = \dots$: (

- $XPO = \dots$:)

- A.: A.

- A.: 65

- A.: 0

- B.: B.

- B.: 35

- B.: 0

- C.: C.

- C.: 25

- C.: 0

- D.: D.

- D.: 55

- D.: 0

- D.: 10.

- D.: O P Q is an

- D.: i s o s c e l e s t r i a n g l e , t h e n

- D.: O P Q is e q u a l t o (

- D.:)
- A.: A.
- A.: 90
- A.: 0
- B.: B.
- B.: 30
- B.: 0
- C.: C.
- C.: 45
- C.: 0
- D.: D.
- D.: 60
- D.: 0
- D.: 11.
- D.: Tangents PA and PB inclined at an angle 60
- D.: 0
- D.: as shown in the figure, the ratio of lengths of
- D.: OA, OP and AP is(
- D.:)
- A.: A.
- A.: 1 : 2 : 3
- B.: B.
- B.: 3 : 2 : 1
- C.: C.

- C.: $\frac{3}{4}$

- C.: u

- C.: : 2 : 1

- D.: D.

- D.: 1 : 2 :

- D.: $\frac{3}{4}$

- D.: u

- D.: 12.

- D.: A reao f

- D.:)

- A.: A.

- A.: r

- A.: 2

- A.: (2

- A.: -

- N ;: N ;

- B.: B.

- B.: r

- B.: 2

- B.: (4

- B.: -

- N ;: N ;

- C.: C.

- C.: r

- C.: 2

- C.: (5

- C.: -

- N ;: N ;

- D.: D.

- D.: r

- D.: 2

- D.: (6

- D.: -

- N ;: N ;

- N ;: 13.

- N ;: O PQ is an

- N ;: isosceles triangle, then

- N ;: O PQ is equal to (

- N ;:)

- A.: A.

- A.: 90

- A.: 0

- B.: B.

- B.: 30

- B.: 0

- C.: C.

- C.: 45

- C.: 0

- D.: D.

- D.: 60

- A: A

- O: O

- Q: Q

- P: P

- P: P

- O: O

- Y: Y

- X: X

- P: P

- A: A

- B: B

- O: O

- O: 60

- O: 0

- A: A

- B: B

- O: O

- P: P

- P: 40

- P: 0

- P: (

- P:)

- P: r
- P: 2
- P: r
- SECAN TS: SECAN TS
- A ND: A ND
- TA NG EN T S TO TH E C IRC LE: TA NG EN T S TO TH E C IRC LE
- TA NG EN T S TO TH E C IRC LE: M arch 201 5 to
- TA NG EN T S TO TH E C IRC LE: r t
- TA NG EN T S TO TH E C IRC LE: 4
- TA NG EN T S TO TH E C IRC LE: t
- JUN E: JUN E
- JUN E: ï t r t
- JUN E: 4
- JUN E: 14.
- JUN E: In th eg iv en figu re OA and O B areradi i .PA and PB are tang ents to th e ci rcl e at po
in ts A and
- JUN E: B.If
- JUN E: á
- AO B =130: AO B =130
- AO B =130: o
- AO B =130: ,th en
- AO B =130: á
- A PB =: A PB =
- A PB =: (
- A PB =: Ma y 20 22

- A PB =:)
- A.: A.
- A.: 40
- A.: o
- B.: B.
- B.: 50
- B.: o
- C.: C.
- C.: 60
- C.: o
- D.: D.
- D.: 70
- D.: o
- D.: 15.
- D.: In the given figure
- D.: centre of the circle,
- D.: OA and OB are radii .PA and PB are
- D.: tangents to the circle at points A and B. If
- D.: $\angle AOB = 120^\circ$
- $\angle AOB = 120^\circ$
- $\angle AOB = 120^\circ$
- $\angle AOB = 120^\circ$
- $\angle AOB = 120^\circ$, then

- $AOB = 1: \hat{a}$

- $APB =: APB =$

- $APB =: ($

- $APB =: A \text{ ug} .$

- $APB =: 22$

- $APB =:)$

- $A.: A.$

- $A.: 6$

- $A.: 0$

- $A.: o$

- $B.: B.$

- $B.: 3$

- $B.: 0$

- $B.: o$

- $C.: C.$

- $C.: 9$

- $C.: 0$

- $C.: o$

- $D.: D.$

- $D.: 45$

- $D.: o$

- $D.: 16.$

- $D.: \text{In the given figure, AP and AQ are two tangents to a circle with centre 'O' such that}$

- $D.: \angle POQ = 125^\circ, \text{ then}$

- D.: PAQ is (
- D.:)
- A.: A.
- A.: 55°
- B.: B.
- B.: 25°
- C.: C.
- C.: 35°
- D.: D.
- D.: 45°
- D.: 17.
- D.: In the given figure PA and PB are tangent lines drawn to the
- D.: circle and AB is a chord, If PA = 6 cm and
- $\angle PAB = 60^\circ$, $\angle PBA = 60^\circ$,
- $\angle PAB = 60^\circ$; then the length of the chord AB is
- $\angle PAB = 60^\circ$; (
- $\angle PAB = 60^\circ$; Aug .22
- $\angle PAB = 60^\circ$;)
- A.: A.
- A.: 5 cm
- B.: B.
- B.: 6 cm
- C.: C.
- C.: 7 cm

- D.: D.

- D.: 4 cm

- D.: 18.

- D.: If the length of a tangent from an external point 'A' at a distance of 5

- D.: cm

- D.: from the centre of the

- D.: circle is 4

- D.: cm

- D.: , then the radius of the circle is .

- D.:

- D.: (

- D.:)

- A.: A.

- A.: 5 +

- A.: $\frac{3}{4}$

- A.: u

- A.: cm

- B.: B.

- B.: 5

- B.: cm

- C.: C.

- C.: 3

- C.: cm

- D.: D.

- D.: 7

- D.: cm

- D.: 19.

- D.: In a circle, 'O' is the centre, P is the external point and AP is the tangent drawn to the circle

- D.: from P, OA is the radius. If

- $\angle APO = 30^\circ$: $\angle APO = 30^\circ$

- $\angle APO = 30^\circ$: then

- $\angle POA = ______$: $\angle POA = ______$

- A.: A.

- A.: 12

- A.: 0

- A.: o

- B.: B.

- B.: 9

- B.: 0

- B.: o

- C.: C.

- C.: 3

- C.: 0

- C.: o

- D.: D.

- D.: 60

- D.: o

- D.: 20.

- D.: O' is the centre. PA and PB are tangents drawn to the circle from point P. If angle between

- D.: cm

- D.: , then the radius of the circle is

- A.: A.

- A.: $\frac{3}{4}$

- A.: 7

- A.: 6

- A.: cm

- B.: B.

- B.: 2

- B.: cm

- C.: C.

- C.: 1

- C.: cm

- D.: D.

- D.: 2

- D.: $\frac{3}{4}$

- D.: u

- D.: cm

- D.: 21.

- D.: The number of secants can be drawn to a circle from an external point is _ _ _

- A.: A.

- A.: Infinite

- B.: B.

- B.: 1

- C.: C.

- C.: 2

- D.: D.

- D.: 0

- D.: 22.

- D.: PA and PB are tangents to a circle drawn from an external point P to the circle. If $PA = 7$

- D.: cm

- D.: ,

- D.: 23.

- D.: then $PB =$

- D.: ____

- A.: A.

- A.: ;

- A.: 6

- A.: cm

- B.: B.

- B.: 7

- B.: cm

- C.: C.

- C.: 14

- C.: cm

- D.: D.

- D.: 49

- D.: cm

- SECAN TS: SECAN TS

- A ND: A ND

- TA NG EN T S: TA NG EN T S

- TO TH E C IRC LE: TO TH E C IRC LE

- A: A

- P: P

- O: O

- B: B

- B: 1

- B: 3

- B: 0

- B: 0

- A: A

- P: P

- O: O

- B: B

- B: 6

- B: 0

- B: 0

- A: A

- P: P

- O: O

- B: B

- B: 1
- B: 2
- B: 0
- B: 0
- P: P
- A: A
- O: O
- Q: Q
- Q: 1
- Q: 25
- Q: 0
- Q: March 2015 to
- Q: r t
- Q: 4
- Q: t
- JUN E: JUN E
- JUN E: i t r t
- JUN E: 4
- MENSURAT IO N: MENSURAT IO N
- MENSURAT IO N: 1
- MENSURAT IO N: MARK
- MENSURAT IO N: 1.
- MENSURAT IO N: If acyl ind er and acon e are o f th es ame rad ius and heig ht ,th en h ow many con es full of milk
- MENSURAT IO N: can fi ll th e cy lin der?A nsw erw it h reason s . (

- MENSURAT IO N:)
- MENSURAT IO N: 2.
- MENSURAT IO N: If the radius of hemisphere is 21
- MENSURAT IO N: cm
- MENSURAT IO N: , then find its volume.(
- MENSURAT IO N:)
- MENSURAT IO N: 3.
- MENSURAT IO N: a
- MENSURAT IO N: conical solid block is
- MENSURAT IO N: 8
- MENSURAT IO N: 7
- N: N
- N: a
- N: 3
- N:)
- N: 4.
- N:)
- N: 5.
- N: Find the curved
- N: surface area of cylinder of radius 14
- N: cm
- N: and height 21
- N: cm
- N: .

- N: @

- N: è

- L: L

- L: 6 6

- L: ;

- A: A

- A: (

- A:)

- A: 6.

- A: Write the formula to find the curved surface area of a cone and explain each term in it. (

- A:)

- A: 7.

- A: If a cone is inscribed in a cylinder, what is the ratio of their volumes ? (

- A:)

- A: 8.

- A: The vertex angle of a cone is 60°

- A: 0

- A: Find the ratio of the diameter with the height of the cone.

- A: 9.

- A:)

- A: 10.

- A: Write the formula to find the volume of a cone and explain each term in it .

- A: (

- A:)

- A: 11.

- A: Find the volume of liquid hemispherical bowl can hold, where radius of the bowl is 4.2

- A: cm

- A: .

- A: (

- A:)

- A: 12.

- A: In a hemispherical bowl of 2.1

- A: cm

- A: radius is

- A: -

- A: cream is there.

- A: Find the volume of the bowl.

- A: 13.

- A: If the metallic cylinder of height 4

- A: cm

- A: and radius 3

- A: cm

- A: is melted under recast into a sphere,

- A: then find the radius of the sphere.

- A: (

- A:)

- A: 14.

- A: Write the formula for finding lateral surface area of a cylinder and explain each term in it.

- A: 15.

- A: A joker cap is in the form of a right circular cone, whose base radius is 7 cm and slant height

- A: (

- A: May 2022

- A:)

- A: 16.

- A: If the ratio of the radii of two right circular cylinders is 1:2 and the ratio of their heights is

- A: 2:3 then find the ratio of their

- A: volume

- A: m

- A: es

- A: .

- A: (

- A: Aug .22

- A:)

- TRIGONOMETRY: 1.

- TRIGONOMETRY: Show that \tan

- TRIGONOMETRY: 2

- TRIGONOMETRY: à

- TRIGONOMETRY: 5

- TRIGONOMETRY: Ö â

- TRIGONOMETRY: æ

- TRIGONOMETRY: .

- TRIGON OME TRY:
- TRIGON OME TRY: =
- TRIGON OME TRY: 1 .(
- TRIGON OME TRY:)
- TRIGON OME TRY: 2.
- TRIGON OME TRY: E xpl ain t h e
- TRIGON OME TRY: mean in g o f co s A . (
- TRIGON OME TRY:)
- TRIGON OME TRY: 3.
- TRIGON OME TRY: If
- TRIGON OME TRY: à
- TRIGON OME TRY: =
- TRIGON OME TRY: $\frac{3}{4}$
- TRIGON OME TRY: u
- TRIGON OME TRY: (w here
- TRIGON OME TRY: à
- TRIGON OME TRY: i s acu t e),t h en find th ev alu eo f $1 + \cos$
- TRIGON OME TRY: à
- TRIGON OME TRY: . (
- TRIGON OME TRY:)
- TRIGON OME TRY: 4.
- TRIGON OME TRY: E valu at e :
- TRIGON OME TRY: q g l
- TRIGON OME TRY: $9 <$

- TRIGONOMETRY: ,

- TRIGONOMETRY: a m q

- TRIGONOMETRY: 7 6

- TRIGONOMETRY: ,

- E: E

- E: r_l

- E: 8 6

- E: ,

- E: a m r

- E: 8 <

- E: ,

- E: .

- E: (

- E:)

- E: 5.

- E: If $\sin A =$

- E: 5

- E: $\frac{3}{4}$

- E: 6

- E: and $\cot B = 1$, prove that $\sin (A + B)$

- E: $= 1$, where A and B are both acute

- E: angles .(

- E:)

- E: 6.

- E: Express \cos

- E: E

- E: in terms of \tan

- E: E

- E: .

- E: (

- E:)

- E: 7.

- E: If \cos

- E: E

- E: =

- E: 5

- E: $\frac{3}{4}$

- E: 6

- E: , then find the value of $4 + \cot$

- E: E

- E: . (

- E:)

- E: 8.

- E: Is it correct to say that \sin

- E: E

- E: $=\cos (90$

- E: E

- E:) why ? (

- E:)
- E: 9.
- E: Find the value of $\tan 2A$,
- E: if
- E: $\cos 3A = \sin 45$
- E: 0
- E: . (
- E:)
- E: 10.
- E: Prove that $4t \tan$
- E: 2
- E: 45
- E: 0
- E: -
- E: \csc
- E: 2
- E: 30
- E: 0
- E: $+\cos$
- E: 2
- E: 30
- E: 0
- E: =
- E: 7

- E: 8
- E: .
- E: (
- E:)
- E: 11.
- E: U sin g t he fig ure giv en of
- ABC,: ABC,
- ABC,: p rov e th at si n
- ABC,: 2
- E: E
- E: +co s
- E: 2
- E: E
- E: =1
- E: (
- E:)
- E: 12.
- E: E valu at e
- E: cos ec39
- E: 0
- E: .sec 51
- E: 0
- E: t an 51
- E: 0

- E: .co t 3 9
- E: 0
- E: . (
- E:)
- E: 13.
- E: v alu eo f co s
- E: 2
- E: B +si n
- E: 2
- A .(: A .(
- A .(:)
- A .(: 14.
- A .(: t an 0
- A .(: 0
- A .(: .
- A .(: t an1
- A .(: 0
- A .(: .tan2
- A .(: 0
- A .(:tan 89
- A .(: 0
- A .(: w ith Ravi ?G iv e reaso n .
- A .(: (
- A .(:)

- A .(: 15.
- A .(: (
- A .(: Ma y
- A .(: 22
- A .(:)
- A: A
- B: B
- C: C
- E: E
- MEN SURA TIO N /: MEN SURA TIO N /
- TR IG O N O ME TRY: TR IG O N O ME TRY
- TR IG O N O ME TRY: M arch 201 5 to
- TR IG O N O ME TRY: r t
- TR IG O N O ME TRY: 4
- TR IG O N O ME TRY: t
- JUN E: JUN E
- JUN E: ï t r t
- JUN E: 4
- JUN E: 16.
- JUN E: E xp ress
- JUN E: s ec
- JUN E: (
- JUN E: Aug 2
- JUN E: 2

- JUN E:)
- JUN E: 17.
- JUN E: (
- JUN E:)
- JUN E: 18.
- JUN E: Fi nd th ev al u eo f
- JUN E: q c a
- JUN E: 7 ;
- JUN E: ,
- JUN E: Ö â æ Ø Ö
- JUN E: 9 7
- JUN E: ,
- F: F
- F: t
- ? K P: ? K P
- ? K P: v w
- ? K P: 4
- E: E
- E: æ Ü á
- E: : 4
- E: ,
- E: Ö â æ
- E: 7 4
- E: ,

- E: (
- E:)
- E: 19.
- E: Express
- E: sin
- E: in terms of
- E: tan
- E: .
- E: 20.
- APPLICATIONS OF TRIGONOMETRY: 1.
- APPLICATIONS OF TRIGONOMETRY: A person from the top of a building of height 25
- APPLICATIONS OF TRIGONOMETRY: m
- APPLICATIONS OF TRIGONOMETRY: bottom at an angle of elevation of 45
- APPLICATIONS OF TRIGONOMETRY: 0
- APPLICATIONS OF TRIGONOMETRY: and at an angle of depression 60
- APPLICATIONS OF TRIGONOMETRY: 0
- APPLICATIONS OF TRIGONOMETRY: respectively. Draw a
- APPLICATIONS OF TRIGONOMETRY: diagram for this data. (
- APPLICATIONS OF TRIGONOMETRY:)
- APPLICATIONS OF TRIGONOMETRY: 2.
- APPLICATIONS OF TRIGONOMETRY: A person observed the top of a tree at an angle of elevation of
- APPLICATIONS OF TRIGONOMETRY: 60
- APPLICATIONS OF TRIGONOMETRY: 0
- APPLICATIONS OF TRIGONOMETRY: when the observation point

- APPLICATIONS OF TRIANGOMETRY: was 5
- APPLICATIONS OF TRIANGOMETRY: m
- APPLICATIONS OF TRIANGOMETRY: away from the foot of the tree. Draw a diagram for this data. (
- APPLICATIONS OF TRIANGOMETRY:)
- APPLICATIONS OF TRIANGOMETRY: 3.
- APPLICATIONS OF TRIANGOMETRY: 0
- APPLICATIONS OF TRIANGOMETRY: to 90
- APPLICATIONS OF TRIANGOMETRY: 0
- APPLICATIONS OF TRIANGOMETRY: , then the length of the tower
- APPLICATIONS OF TRIANGOMETRY:)
- APPLICATIONS OF TRIANGOMETRY: 4.
- APPLICATIONS OF TRIANGOMETRY: h
- APPLICATIONS OF TRIANGOMETRY: d
- APPLICATIONS OF TRIANGOMETRY: à
- APPLICATIONS OF TRIANGOMETRY: the relation among
- APPLICATIONS OF TRIANGOMETRY: h
- APPLICATIONS OF TRIANGOMETRY: ,
- APPLICATIONS OF TRIANGOMETRY: d
- APPLICATIONS OF TRIANGOMETRY: and
- APPLICATIONS OF TRIANGOMETRY: à
- APPLICATIONS OF TRIANGOMETRY: . (
- APPLICATIONS OF TRIANGOMETRY:)
- APPLICATIONS OF TRIANGOMETRY: 5.
- A: A

- A: pole and its shadow have same length, find the angle of the ray make with the earth at
- A: that
- A: time.(
- A:)
- A: 6.
- A: An observer observes the
- A: top of tower from two points on the same side of tower and on
- A: the same straight line which are at distances of 5 m and 8 m with angles of elevation 60° and
- A: 45° respectively. Draw as usual diagram for the given data.
- A: (
- A: Aug .22
- A:)
- A: 7.
- A: An observer standing at a distance of 10 m from the foot of tower, observes its top with an
- A: (
- A: A
- A: .2
- A: 3
- A:)
- A: 8.
- A: A flag pole stands vertically on the ground. From a point which is 15 m away from the
- A: foot of the tower, the angle of elevation of the top of the tower is 45° . Draw as usual

i agree

- A: for the given data.

- A: 9.

- J: J

- PROBABILITY: 1.

- PROBABILITY: When a die is rolled once, what is the probability of

- PROBABILITY: getting a multiple of 3 out of possible

- PROBABILITY: outcomes? (

- PROBABILITY:)

- PROBABILITY: 2.

- PROBABILITY: The probability of an event is always in between

- PROBABILITY: 0

- PROBABILITY: and

- PROBABILITY: 1

- PROBABILITY: why? (

- PROBABILITY:)

- PROBABILITY: 3.

- PROBABILITY: Find the probability of getting a sum of the numbers on them is 7, when two dice are rolled at

- PROBABILITY: a time. ((

- PROBABILITY:)

- PROBABILITY: 4.

- PROBABILITY: Find the probability of getting a prime number, when a card is drawn at random from the

- PROBABILITY: numbered cards from 1 to 25. (

- PROBABILITY:)

- PROBABILITY: 5.

- PROBABILITY: From the first 50 natural numbers, find the probability of randomly selected numbers a

- PROBABILITY: multiplied by 3. (

- PROBABILITY:)

- PROBABILITY: 6.

- PROBABILITY: A die is thrown once. Find the probability of getting a composite number. (

- PROBABILITY:)

- PROBABILITY: 7.

- PROBABILITY: What is the probability of getting exactly 2 heads ,

- PROBABILITY: when three coins are tossed

- PROBABILITY: simultaneously. (

- PROBABILITY:)

- PROBABILITY: 8.

- PROBABILITY: When a die is rolled ,

- PROBABILITY: find the probability of getting an odd prime number.

- PROBABILITY: (

- J: J

- J:)

- J: 9.

- J: From English alphabet if a letter is chosen at random, then find the probability that the letter is

- J: a consonant. (

- J:)
- J: 10.
- J: Write
- J: two examples
- J: frequently likely events .
- J: (
- J:)
- J: 11.
- J: If a dice rolled on ce, then find the probability of getting an odd number.
- J: (
- J: May 20 22
- J:)
- J: 12.
- J: If an unbiased die is rolled on ce, then find the probability of getting a prime number on its
- J: top face.
- J: (
- J: Aug 2 2
- J:)
- J: 13.
- J: Find the probability of getting a vowel if a letter is chosen randomly from the word
- "INNOVATION ": "INNOVATION "
- "INNOVATION ": (
- A: A
- A: 2

- A: 3

- A:)

- STATISTICS: 1.

- STATISTICS: How do you find the deviation from the assumed mean for the above data?
(

- STATISTICS:)

- STATISTICS: 2.

- STATISTICS: Write the formula to find the median of grouped data and explain each

- STATISTICS: term

- STATISTICS: . (

- STATISTICS: ,

- STATISTICS: ,

- STATISTICS:)

- STATISTICS: 3.

- STATISTICS: When an observation in a data is abnormally more than or less than the
remaining

- STATISTICS: observations in the data, does it affect the mean or mode or median?

- STATISTICS: Why? (

- STATISTICS:)

- STATISTICS: Class Interval

- STATISTICS: 10

- STATISTICS: 25

- STATISTICS: 25

- STATISTICS: 40

- STATISTICS: 40

- ST ATISTICS: 55
- ST ATISTICS: 55
- ST ATISTICS: 70
- ST ATISTICS: 70
- ST ATISTICS: 85
- ST ATISTICS: 85
- ST ATISTICS: -
- ST ATISTICS: 1 00
- ST ATISTICS: Frequ en cy
- ST ATISTICS: 2
- ST ATISTICS: 3
- ST ATISTICS: 7
- ST ATISTICS: 6
- ST ATISTICS: 6
- ST ATISTICS: 6
- P RO BAB IL IT Y / : P RO BAB IL IT Y /
- STA TI ST ICS: STA TI ST ICS
- STA TI ST ICS: M arch 201 5 to
- STA TI ST ICS: r t
- STA TI ST ICS: 4
- STA TI ST ICS: t
- JUN E: JUN E
- JUN E: ï t r t
- JUN E: 4

- JUN E: 4.

- JUN E: Write the formula to find the mean of aggregated data, using assumed mean method and

- JUN E: explain each term.(

- JUN E:)

- JUN E: 5.

- JUN E: 2, 5, 3,

- JUN E: (

- JUN E:)

- JUN E: 6.

- JUN E: Write the first 10 prime numbers and

- JUN E: find their median .(

- JUN E:)

- JUN E: 7.

- JUN E: Write the formula to find the median of grouped data and explain the alphabet in it .(

- JUN E:)

- JUN E: 8.

- JUN E: her? Justify your answer.(

- JUN E:)

- JUN E: 9.

- JUN E: Find the mean of the

- JUN E: prime numbers less than 30 .

- JUN E: 10.

- JUN E: Find the median of first seven composite numbers .(

- JUN E:)
- JUN E: 11.
- JUN E: Find the mode of the data 6, 8, 3, 6, 3, 7, 4, 6, 7, 3, 6.
- JUN E: (
- JUN E:)
- JUN E: 12.
- JUN E: Find the mean of the factors of 24. (
- JUN E:)

2 MARKS

- H K C: 1.
- H K C: Write any three numbers of two digits. Find the L.C.M. and H.C.F. for the above numbers by
- H K C:)
- H K C: 2.
- H K C: Give an example for each of the following
- H K C: a.
- H K C: The product of two rational numbers is a rational number.
- H K C: b.
- H K C: The product of two
- H K C: irrational numbers is an irrational number. (
- H K C:)
- H K C: 3.
- H K C: state with reasons which of the following are rational numbers and which are irrational

- H K C: n umb ers . (i)

- H K C: $\frac{3}{4}$

- H K C: t t w

- H K C: x

- H K C: $\frac{3}{4}$

- H K C: v

- H K C: (i i)

- H K C: x

- H K C: $\frac{3}{4}$

- H K C: w r

- H K C: +

- H K C: z

- H K C: $\frac{3}{4}$

- H K C: s t w

- H K C: . (

- H K C:)

- H K C: 4.

- H K C: If

- H K C: x

- H K C: 2

- H K C: +

- H K C: y

- H K C: 2

- H K C: =7

- H K C: xy
- H K C: then show that 2
- H K C: \log
- H K C: $($
- H K C: x
- H K C: $+$
- H K C: y
- H K C: $)=$
- H K C: $\log x$
- H K C: $+$
- H K C: $\log y$
- H K C: $+2$
- H K C: \log
- H K C: 3
- H K C: $($
- H K C: $)$
- H K C: $5.$
- H K C: Express 2016 as product of prime factors. $($
- H K C: $)$
- H K C: $6.$
- H K C: Write any
- H K C: two
- H K C: three
- H K C: $-$

- H K C: d i g i t
- H K C: n u m b e r s .Find t h e i r L.C.M. a n d G .C.D .by p r i m e f a c t o r i z a t i o n
- H K C: m e t h o d . (
- H K C:)
- H K C: 7.
- H K C: P r o v e t h a t $2 +$
- H K C: $\frac{3}{4}$
- H K C: u
- H K C: i s i r r a t i o n a l . (
- H K C:)
- R E A L N U M B E R S: R E A L N U M B E R S
- R E A L N U M B E R S: M a r c h 201 5 t o
- R E A L N U M B E R S: J u n e 20 2
- R E A L N U M B E R S: 4
- R E A L N U M B E R S: t
- R E A L N U M B E R S: 4
- R E A L N U M B E R S: 8.
- R E A L N U M B E R S: S h o w t h a t
- H K C: H K C
- H K C: 5 : 6
- H K C: 7 8 7
- E: E
- E: t
- H K C: H K C

- H K C: ;
- H K C: =
- F: F
- H K C: H K C
- H K C: 5
- H K C: ;
- L: L
- H K C: H K C
- H K C: t
- H K C: . (
- H K C:)
- H K C: 9.
- H K C: L al it ha say s th at
- H K C: H CF and L C Mo f th en umb ers 80 and 6 0 are 20 and 12 0 resp ect iv el y. D o
- H K C: y ou ag reew ith
- H K C: h er ?J us ti fy . (
- H K C:)
- H K C: 10.
- H K C: If
- H K C: x
- H K C: 2
- H K C: +
- H K C: y
- H K C: 2

- H K C: =10
- H K C: xy
- H K C: , prov e th at 2
- H K C: l og
- H K C: (
- H K C: x
- H K C: +
- H K C: y
- H K C:) =
- H K C: l og x
- H K C: +
- H K C: log y
- H K C: + 2
- H K C: lo g
- H K C: 2 +
- H K C: l og
- H K C: 3 . (
- H K C: ,
- H K C:)
- H K C: 11.
- H K C: If 2304 =2
- H K C: x
- H K C: x3
- H K C: y

- H K C: then find the value of log

- H K C: y

- H K C: x

- H K C: . (

- H K C:)

- A = { : 1.

- A = { : If A =

- A = { : {

- A = { : x

- A = { : :

- A = { : x

- D: D

- N: N

- N: and

- N: x

- N: < 6} and B= {

- N: x

- N: :

- N: x

- D: D

- D: N and 3 <

- D: x

- D: < 8}

- D: then

- D: Show that A
- D: A with the help of Venn diagram. (
- D:)
- D: 2.
- D: Answer the following questions and justify your answers .
- D: a.
- A = { : A = {
- A = { : x
- A = { : :
- A = { : x
- D: D
- N , : N ,
- N , : x
- N , : <
- N , : 2015 }, is it a
- N , : finite set or infinite set
- N , : ?
- N , : b.
- B = { : B = {
- B = { : x
- B = { : :
- B = { : x
- B = { : + 5 = 5 }
- B = { : is it an ull set or a Universal set ? (

- $B = \{ : \}$
- $B = \{ : 3.$
- $A = \{ : A = \{$
- $A = \{ : x$
- $A = \{ : :$
- $A = \{ : x$
- $\emptyset : \emptyset$
- $\emptyset : \mathbb{N}$, and
- $\emptyset : x$
- $\emptyset : \text{is a factor of } 30 \}; B = \{$
- $\emptyset : x$
- $\emptyset : :$
- $\emptyset : x$
- $\emptyset : \emptyset$
- $\emptyset : \mathbb{N}$, and
- $\emptyset : x$
- $\emptyset : \text{is a prime factor of } 30 \}$
- $\emptyset : \text{draw Venn diagram for } A$
- $\emptyset : \emptyset$
- $B (: B ($
- $B (:)$
- $B (: 4.$
- $B (: \text{If } A = \{$
- $B (: x$

- B (: :

- B (: x

- B: B

- N ,: N ,

- N ,: x

- $\{x \in \mathbb{N} : x < 10\}$, $B = \{x \in \mathbb{N} : x < 10\}$, $B = \{$

- $\{x \in \mathbb{N} : x < 10\}$, $B = \{x$

- $\{x \in \mathbb{N} : x < 10\}$, $B = \{ :$

- $\{x \in \mathbb{N} : x < 10\}$, $B = \{x$

- $\{x \in \mathbb{N} : x < 10\}$, $B = \{x \text{ is a prime number}$

- $\{x \in \mathbb{N} : x < 10\}$, $B = \{x \text{ and } x$

- $\{x \in \mathbb{N} : x < 10\}$, $B = \{x$

- $\{x \in \mathbb{N} : x < 10\}$, $B = \{x \in \mathbb{N} : x < 10\}$, Then show

- $\{x \in \mathbb{N} : x < 10\}$, $B = \{x \text{ that } A$

- $\{x \in \mathbb{N} : x < 10\}$, $B = \{x \text{ with the help of Venn diagram. ($

- $\{x \in \mathbb{N} : x < 10\}$, $B = \{x \}$

- $\{x \in \mathbb{N} : x < 10\}$, $B = \{5\}$.

- $\{x \in \mathbb{N} : x < 10\}$, $B = \{x \text{ : If } A = \{1, 2, 3, 4\}, B = \{2, 4, 6, 8, 10\}, \text{ then represent the Venn diagram of } A$

- B: B

- B: . (

- B:)

- B: 6.

- B: If

- B: μ

- B: $= \{0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$, $A = \{2, 3, 5, 8\}$ and $B = \{0, 3, 5, 7, 10\}$. Then

- B: represent A

- B:

- B: Bin the Venndiagram.(

- B:)

- B: 7.

- B: If

- A $= \{x \in A : x$

- A $= \{x \in A : x$

- A $= \{x \in A : x$

- A $= \{x \in A : x$

- A $= \{x \in A : x \text{ is a factor of } 12\}$ and $B = \{$

- A $= \{x \in A : x$

- A $= \{x \in A : x$

- A $= \{x \in A : x$

- A $= \{x \in A : x \text{ is a factor of } 6\}$ then find A

- A $= \{x \in A : x$

- A $= \{x \in A : x$

- A $= \{x \in A : x$

- B.: B.

- B.: 8.

- B.: If $A = \{1, 2, 3, 4, 5\}$ and $B = \{2, 4, 6, 8\}$.

- B.: Then show that

- B.: n

- (A: (A

- (A: \hat{e}

- B) =: B) =

- B) =: n

- (A) +: (A) +

- (A) +: n

- (B): (B)

- (B): n

- (A: (A

- (A: \hat{e}

- B): B).

- B): (

- B): Ma y 2022

- B):)

- B): 9.

- B): If $A = \{4, 8, 12, 16, 20\}$, $B = \{6, 12, 18, 24, 30\}$,

- B): t h e n s h o w t h a t $n(A$

- B): \hat{e}

- B) =: B) =

- B) =: $n(A) + n(B)$

- B) =: $n(A$

- B) =: \hat{e}

- B) .: B) .

- B) .: (

- AU G: AU G
- AU G: 202 2
- AU G:)
- AU G: 10.
- AU G: Fro m th eg iv en Venn di ag ram
- AU G: s h ow th at
- AU G: n
- (A: (A
- (A: \bar{e}
- B) =: B) =
- B) =: n
- (A) +: (A) +
- (A) +: n
- (B): (B)
- (B): n
- (B): 11.
- (B): From th eV enn d i ag ram,fin d t h e fol low ing set s .
- (B): (i) X
- Y: Y
- Y: (i i)X
- Y: Y
- Y: (i ii)X
- Y: Y
- X: X

- X: 12.

- X: If $A = \{1, 2, 3, 4, 5, 6\}$ $B = \{2, 4, 6, 8\}$, then show that

- X: n

- (A: (A

- $B) = B) =$

- $B) = n$

- (A) +: (A) +

- (A) +: n

- (B): (B)

- (B): -

- (B): n

- UN E: 1.

- UN E: For what value of

- UN E: k

- UN E: ,

- UN E: 4 is a zero of the polynomial

- UN E: x

- UN E: 2

- UN E: x

- UN E: (2

- UN E: k

- UN E: + 2). (

- UN E:).

- UN E: 2.

- UN E: Length of a rectangle is 5 units more than its breadth. Express its perimeter in polynomial form.

- UN E: 3.

- UN E: Show that 2 and

- F: F

- F: 5

- F: 7

- F: are zeros of the polynomial 3

- F: x

- F: 2

- F: 5

- F: x

- F: 2 (

- F:)

- F: 4.

- F: Which of

- F: $\frac{3}{4}$

- F: t

- F: and 2 is a zero of the polynomial p(

- F: x

- F:) =

- F: x

- F: 3

- F: 2

- F: x

- F: ? Why ? (

- F:)

- F: 5.

- F: D i v i d e

- F: x

- F: 3

- F: 3

- F: x

- F: 2

- F: + 5

- F: x

- F: 3 b y

- F: x

- F: 2

- F: 2 .And veri fy t he di vis ion lemma. (

- F:)

- F: 6.

- F: Co mp let et he fol low in g t ab l e fo rt h epo lyno mial

- F: y

- F: =

- F: p

- F: (

- F: x

- F:) =

- F: x

- F: 3

- F: 2

- F: x

- F: + 3. (

- F:)

- F: x

- F: 1

- F: 0

- F: 1

- F: 2

- F: x

- F: 3

- F: 2

- F: x

- F: 3

- F: y

- F: (

- F: x

- F: ,

- F: y

- F:)

- F: 7.

- F: If one of the zero's of the cubic polynomial

- F: p

- F: (

- F: x

- F:) =

- F: ax

- F: 3

- F: +

- F: bx

- F: 2

- F: +

- F: cx

- F: +

- F: d

- F: is zero ,then find the product

- F: of other two zeros of

- F: p

- F: (

- F: x

- F:).(

- F: a

- F:)

- F: 8.

- F: Divide

- F: x

- F: 3

- F: 4

- F: x

- F: 2

- F: + 5

- F: x

- F: 2 by

- F: x

- F: 2 . (

- F:)

- F: 9.

- F: If the zeroes of the polynomial

- F: x

- F: 3

- F: 9

- F: x

- F: 2

- F: +26

- F: x

- F: 24 are

- F: ,

- F: ,

- F: +

- F: then find the values of

- F: and

- F: (

- F:)

- J: 1.

- J: If we multiply or divide both sides of a linear equation by a non

- J: -

- J: zero number, then the roots

- J: of that linear equation will remain the

- J: y with an example.

- J: 2.

- J: Use the table given below to draw the graph. Use the graph drawn to find the values of

- J: a

- J: and

- J: b

- J: . (

- J:)

- J: x

- J: -

- J: 2

- J: 0

- J: 2

- J: 1

- J: b

- J: y

- J: -

- J: 3

- J: 1

- J: a

- J: 3

- J: -

- J: 7

- J: 3.

- J: If the present ages of A and B are

- J: in ratio of 9

- J: : 4

- J: and after 7 years the ratio of the ages will

- J: be

- J: 5 : 3 then find their present ages . (

- J:)

- J: 4.

- J: So let the following pair of linear equations be solved by substitution method .2

- J: x

- J: 3

- J: y

- J: =19 and

- J: 3

- J: x

- J: 2

- J: y
- J: $= 21$ (
- J:)
- J: 5.
- J: If the measures of angles of a triangle are
- J: x
- J: 0
- J: ,
- J: y
- J: 0
- J: and 40
- J: 0
- J: ,
- J: and difference between the measures
- J: of angles
- J: x
- J: 0
- J: and
- J: y
- J: 0
- J: is 30
- J: 0
- J: , then find values of
- J: x

- J: 0

- J: and

- J: y

- J: 0

- J: . (

- J:)

- J: 6.

- J: Given the linear equation 3

- J: x

- J: +4

- J: y

- J: = 11 ,

- J: write linear equations in two variables such that their

- J: geometrical representations form parallel lines and intersecting lines . (

- J:)

- J: 7.

- J: Solve the pair of linear equations 2

- J: x

- J: + 3

- J: y

- J: = 8 and

- J: x

- J: +2

- J: y

- J: = 5 by Elimination
- J: method .(
- J:)
- J: 8.
- J: For what values of
- J: m
- J: the following
- J: mx
- J: +4
- J: y
- J: = 10 and 9
- J: x
- J: + 12
- J: y
- J: = 30 system of equations will
- J: have no solution ?
- J: Why ?
- J: (
- J:).
- J: 9.
- J: Solve
- J: 2
- J: x
- J: +

- J: y

- J: =5 and 5

- J: x

- J: + 3

- J: y

- J: = 11 .

- J: (

- J: Ma y 2022

- J:)

- J: 10.

- J: So lv e3

- J: x

- J: + 2

- J: y

- J: = 11 and 2

- J: x

- J: +3

- J: y

- J: =4 .

- J: (

- J: A ug

- J: 2 022

- J:)

- J: 11.

- J: In a rectangle ABCD, AB = 2

- J: x

- J: y

- J: ,BC =1.5,CD =2 and DA =

- J: x

- J: + 3

- J: y

- J: ,then find the values of

- J: x

- J: and

- J: y

- J: .

- J: 12.

- J: Solve the pair of linear equations 3

- J: x

- J: + 2

- J: y

- J: = 11

- J: and 2

- J: x

- J: +3

- J: y

- J: =4

- QUADRATIC EQUATIONS: 1.

- QUADRATIC EQUATIONS: If
- QUADRATIC EQUATIONS: 9
- QUADRATIC EQUATIONS: x
- QUADRATIC EQUATIONS: 2
- QUADRATIC EQUATIONS: +
- QUADRATIC EQUATIONS: kx
- QUADRATIC EQUATIONS: $+ 1 = 0$ has equal roots, then find the value of
- QUADRATIC EQUATIONS: k
- QUADRATIC EQUATIONS: . (
- QUADRATIC EQUATIONS:)
- QUADRATIC EQUATIONS: 2.
- QUADRATIC EQUATIONS: The sum of a number and its reciprocal is
- QUADRATIC EQUATIONS: 5 4
- QUADRATIC EQUATIONS: 7
- QUADRATIC EQUATIONS: Find the number. (
- QUADRATIC EQUATIONS:)
- PAIR OF LINEAR EQUATIONS: PAIR OF LINEAR EQUATIONS
- PAIR OF LINEAR EQUATIONS: /
- QUADRATIC EQUATIONS: QUADRATIC EQUATIONS
- QUADRATIC EQUATIONS: (
- M,16: M,16
- M,16:)
- M,16: .
- M,16: March 2015 to

- M,16: r t
- M,16: 4
- M,16: t
- J: J
- UN E: UN E
- UN E: i t r t
- UN E: 4
- UN E: 3.
- UN E: Is it possible to design a rectangular Garden ,whose length is twice of its
- UN E: breadth and area is
- UN E: 200 m
- UN E: 2
- UN E: ?
- UN E: If so ,so find its length and breadth .(
- UN E:)
- UN E: 4.
- UN E: If the equation
- UN E: kx
- UN E: 2
- UN E: 2
- UN E: kx
- UN E: $+ 6 = 0$
- UN E: has equal roots ,then find the value of k . (
- UN E:)

- UN E: 5.

- UN E: Wi th out calcul at ing th e ro ot s o f

- UN E: x

- UN E: 2

- UN E: 5

- UN E: x

- UN E: $+6 = 0$,ex pl ai n th e natu re o f roo t s . (

- UN E:)

- UN E: 6.

- UN E: Wri t et he Qu ad rat ic eq uati on ,who se roo ts are $2 +$

- UN E: $\frac{3}{4}$

- UN E: u

- UN E: an d 2

- UN E: -

- UN E: $\frac{3}{4}$

- UN E: u

- UN E: .

- UN E: (

- UN E:)

- UN E: 7.

- UN E: Fi nd th e roo ts ofqu art i c equ at io n

- UN E: x

- UN E: 2

- UN E: $+4$

- UN E: x

- UN E: (

- UN E:)

- UN E: 8.

- UN E: Sh as h ank a said th at (

- UN E: x

- UN E: + 1)

- UN E: 2

- UN E: =2 (

- UN E: x

- UN E: 3)

- UN E: i s a q uad rati c eq uati on .Do yo u ag ree?

- UN E: (

- UN E:)

- UN E: 9.

- UN E: Fi nd th ed imen si ons of a rect an gl e,w ho sep eri met er is 3 6 cm and who s e area is 65

- UN E: s q.cm

- UN E: .

- N) (: 1.

- N) (: In a flow er garden ,t here are 23 p lant s i n t he firs t ro w ,2 1 pl ants in t he secon d ro w ,19 p lant s i n

- N) (: t h e th i rd ro w and so on .If th ere are 10 rows in th at flow er garden ,th en fin d t he to tal num b er

- N) (: o f pl an ts in th e la st row wi th t h e h el p o f th e formu l at

- N) (: n

- N) (: =

- N) (: a

- N) (: + (

- N) (: n

- N) (: 1)

- N) (: d.

- N) (: (

- N) (:)

- N) (: 2.

- N) (: If 7 ti mes of 7

- N) (: th

- N) (: t erm of an Ari th meti c Pro gress io n i s equ al to th e 11 t i mes o f 11

- N) (: th

- N) (: t erm of it ,

- N) (: t h en fi nd th e 1 8

- N) (: th

- N) (: t erm of

- N) (: th at Arit hmeti cPro gress io n . (

- N) (:)

- N) (: (

- N) (:)

- Q UADR AT IC EQ U AT IO N S / : Q UADR AT IC EQ U AT IO N S /

- P RO G RESS IO NS: P RO G RESS IO NS

- P RO G RESS IO NS: M arch 201 5 to

- P RO G RESS IO NS: r t

- P RO G RESS IO NS: 4

- P RO G RESS IO NS: t

- JUN E: JUN E

- JUN E: i t r t

- JUN E: 4

- JUN E: 3.

- JUN E: Measu res of si d es o f at riang le arei n A rithmeti c Pro g ress ion .Its perimeter is 30 cm.,th e

- JUN E: d i fferen ceb etw een t he long est an d s ho rt es t side is

- JUN E: 4 cm; t h en fin d t he meas ures o f the sides .

- JUN E: 4.

- JUN E: E xpl ain

- JUN E: t h et

- JUN E: erm

- JUN E: s in th e fo rmu l a S

- JUN E: n

- JUN E: =

- JUN E: á

- JUN E: 6

- JUN E: >

- JUN E: t

- JUN E: =

- E: E

- E: :

- J: J

- F: F

- F: s

- F: ;

- F: @

- F: ?

- F: (

- F:)

- F: 5.

- F: Find the sum of the first 10 terms of an A.P. 3, 15, 27, 39,

- F: (

- F:)

- F: 6.

- F: k

- F: k

- F: + 2, 4

- F: k

- F: 6 and 3

- F: k

- F: 2 are the three

- F: consecutive terms of an A.P. (

- F:)

- F: 7.

- F: Find the 7th term from the end of the arithmetic
- F: progression 7, 10, 13, ..., 184. (
- F:)
- F: 8.
- F: In an arrangement of 13 rows,
- F: every row increases its previous row by two dots and first
- F: row contains 5 dots,
- F: then how many total dots are in the design? (
- F:)
- F: 9.
- F: Write the formula of n
- F: th
- F: term of G.P. and explain the terms in it. (
- F:)
- F: 10.
- F: Which term of the G.P. :
- F: $\frac{3}{4}$
- F: t
- F: , 2, 2
- F: $\frac{3}{4}$
- F: t
- F: , 4, is 32. (
- F:)
- F: 11.

- F: 5, 8, 11, 14,

- F:

- F: is an arithmetic progression. Find the sum of first 20 terms of it.

- F: (

- F: May 22

- F:)

- F: 12.

- F: 3, 6, 9, 12, is an arithmetic progression. Find the sum of first 20 terms of the

- F: progression.

- F: (

- F: Aug. 22

- F:)

- F: 13.

- F: Which term of the A.P. 21, 18, 15, . . . is

- F: 81? Also find the term which becomes zero.

- F: 14.

- F: If 6 times of 6

- F: the

- F: term of an arithmetic progression is equal to 9 times of 9

- F: the

- F: term of it, then

- F: show that 15

- F: the

- F: term of the A.P. is zero. (

- F:)
- F: 15.
- F: In an arithmetic progression, if 4th term is equal to 8 times of the 8th term,
- F: then prove that the 12th term of the progression is zero .
- F: 16.
- F: Write the formula for finding the sum of first n terms of an arithmetic progression and
- F: explain each term.
- JUN E: 1.
- JUN E: Show that the
- JUN E: points $A(4, 2)$, $B(7, 5)$ and $C(9, 7)$ are collinear. (
- JUN E:)
- JUN E: 2.
- JUN E: $A(3, 6)$, $B(3, 2)$ and $C(8, 2)$ are the vertices of a rectangle ABCD . Plot these points
- JUN E: on a
- JUN E: graph
- JUN E: paper. From this find the
- JUN E: -
- JUN E: ordinate of vertex D, so that ABCD will
- JUN E: be a
- JUN E: rectangle.(
- JUN E:)
- JUN E: 3.
- JUN E: Show that the points

- A: A

- A: (

- 3,3) B(0,0) C(3,3) B(0,0) C(3,

- 3,3) B(0,0) C(3,3)

- 3,3) B(0,0) C(3,3) are collinear. (

- 3,3) B(0,0) C(3,3)

- 3,3) B(0,0) C(3,3).

- 3,3) B(0,0) C(3,3): The distance between the points (8,

- 3,3) B(0,0) C(3,3): x

- 3,3) B(0,0) C(3,3) and (

- 3,3) B(0,0) C(3,3): x

- 3,3) B(0,0) C(3,3): 8) is

- 3,3) B(0,0) C(3,3): 2

- 3,3) B(0,0) C(3,3): $\frac{3}{4}$

- 3,3) B(0,0) C(3,3): t

- 3,3) B(0,0) C(3,3): units, then find the value of

- 3,3) B(0,0) C(3,3): x

- 3,3) B(0,0) C(3,3): .(

- 3,3) B(0,0) C(3,3):)

- 3,3) B(0,0) C(3,3): 5.

- 3,3) B(0,0) C(3,3): Two vertices of a triangle are (3, 2), (

- 3,3) B(0,0) C(3,3): 2, 1) and its centroid is

- 3,3) B(0,0) C(3,3): @

- 3,3) B(0,0) C(3,3): 9

- 3,3) B(0,0) C(3,7

- 3,3) B(0,0) C(3, á

- F: F

- F: 5

- F: 7

- A: A

- A: .

- A: Find the

- A: third vertex

- A: of the triangle. (

- A:)

- A: 6.

- A: Find the angle made by the line joining (5, 3) and (

- A: 1 ,

- A: 3) with the positive direction of

- X: X

- X: axis. (

- X:)

- X: 7.

- X: x

- X: x

- X:),(7,2) is

- X: á

- Ü: Ü

- Ü: (

- Ü:)

- Ü: 8.

- Ü: In the diagram on alunar eclipse, the positions of the sun, earth and moon are shown by

- Ü: (

- Ü: 4,6), (

- Ü: k

- Ü: ,

- Ü: 25) and (5 ,

- Ü: 6)

- Ü: respectively, then find the value of

- Ü: k

- Ü: . (

- Ü:)

- Ü: 9.

- Ü: Find the coordinates of the point dividing the segment joining (2,3) and (

- Ü: 4,0)

- Ü: in 1: 2

- Ü: (

- Ü:)

- Ü: 10.

- Ü: Akhil a

- Ü: Akhil?

- Ü: Why?

- Ü: 11.

- Ü: If the area of the triangle formed by joining the points A(

- Ü: x

- Ü: ,

- Ü: y

- Ü:) B(3,2) and

- C: C(

- C: (2,4) is 10

- C: squares units, then show that 2

- C: x

- C: +5

- C: y

- C: +4 = 0 (

- C:)

- A: 1.

- A: A ladder of 3.9

- A: m

- A: Length is laid against wall. The distance between

- A: the foot of the wall and the ladder is 1.5

- A: m

- A: find the height at which

- A: ladder touches the wall.

- A: (

- A:)

- A: 2.

- A: Observe the below diagram and

- A: find the values of

- A: x

- A: and

- A: y

- A: .

- A: (

- A:)

- A: 3.

- A: Observe the below figure

- A: .

- A: In a

- A: \angle

- PQR, : PQR,

- PQR, : if XY

- PQR, : \angle

- PQR, : Q R and PX =

- PQR, : x

- PQR, : 2 ,

- X Q =: X Q =

- X Q =: x

- + 5, PY =: + 5, PY =

- + 5, PY =: x

- + 5, PY =: 3

- + 5, PY =: a

- + 5, PY =: n d Y R =

- + 5, PY =: x

- + 5, PY =: +3 ,th en find th ev alu e

- + 5, PY =: x

- + 5, PY =:)

- + 5, PY =: 4.

- + 5, PY =: A B C i s an is os cel es tri an gl e an d

- + 5, PY =: á

- B =90: B =90

- B =90: 0

- B =90: , th en sho w th at A C

- B =90: 2

- = 2AB: = 2AB

- = 2AB: 2

- = 2AB: .

- = 2AB: (

- = 2AB:)

- A: A

- B: B

- C: C

- D: D

- E: E

- E: 5

- E: cm

- E: x

- E: 3

- E: cm

- E: 6

- E: cm

- R: R

- Q: Q

- Y: Y

- X: X

- X: 3

- A: A

- B: B

- C: C

- D: D

- O: O

- O: 2.

- O: 5

- O: 6

- SIM IL AR TR IANG LE S: SIM IL AR TR IANG LE S

- A: A

- C: C

- D: D

- E: E
- B: B
- B: March 2015 to
- B: r t
- B: 4
- B: t
- UN E: UN E
- UN E: ĩ t r t
- UN E: 4
- UN E: 5.
- UN E: In a
- A BCAD: A BCAD
- BC: BC
- BC: and AD
- BC: 2
- = BD: = BD
- CD ,: CD ,
- CD ,: Pro v et h at
- CD ,: A BC is a
- CD ,: righ t
- CD ,: -
- CD ,: ang led
- CD ,: t riang l e.(
- CD ,:)

- CD ,: 6.

- CD ,: In

- CD ,: x

- 19 ,PB =: 19 ,PB =

- 19 ,PB =: x

- 5 ,AQ =: 5 ,AQ =

- 5 ,AQ =: x

- 5 ,AQ =: 3 ,QC =3 cm.

- 5 ,AQ =: Find

- 5 ,AQ =: x

- 5 ,AQ =: . (

- 5 ,AQ =:)

- 5 ,AQ =: 7.

- 5 ,AQ =: In ABC,D and E are

- 5 ,AQ =: p oin ts on AB and A C respectiv el y .If A B = 14 cm; A D =3 .5

- 5 ,AQ =: cm,

- 5 ,AQ =: A E = 2.5 cm and A C= 10 cm,sh ow th at DE

- 5 ,AQ =: !

- BC.: BC.

- BC.: (

- BC.:)

- BC.: 8.

- BC.: If t he rat io of areas of t wo eq uil ateral t ri ang l es i s 2 5 : 3 6 , t h en fin d th e rat io of h eig hts o f th e

- BC.: t riang les .

- BC.: (
- BC.:)
- BC.: 9.
- BC.: In the given figure, if
- BC.: $0\frac{1}{2}$
- BC.: $\frac{1}{2}$ »
- L: L
- L: 6
- L: 7
- L: ,A E =6 cm and
- L: A C =15 cm, then is D E
- A: A
- A: BC? Justify .
- A: (
- A: Aug .22
- A:)
- A: 4
- A: MARKS
- A: 1.
- A: Observe the figure given below:
- A: In
- A: \angle
- A: PQR, if XY
- A: \propto

- PQ ,: PQ ,
- T \: T \
- \ V: \ V
- L: L
- L: 9
- L: 7
- L: an d QR =7 .2cm,
- L: t h en fi nd th el en gt h of RY. (
- L:)
- L: 2.
- L: A B C i s a ri ght
- L: -
- L: an gl ed tri an gl ew hi ch is rig ht an gl ed at C. l et AB =
- L: c
- ,BC =: ,BC =
- ,BC =: a
- ,CA =: ,CA =
- ,CA =: b
- ,CA =: and
- ,CA =: l et
- ,CA =: p
- ,CA =: be th e leng th o f p erp en di cu l ar from C on A B. Pro v et hat
- ,CA =: c
- ,CA =: =

- ,CA =:

- :

- : . (

- :)

- : 3.

- : Draw a line segment of length 8.1 cm and divide it in the ratio of 5

- : :

- : 4 .Then measure the

- : divided two parts .(this problems should be done by construction) (

- :)

- : 4.

- : Construct a triangle of sides 5cm,6 cm and 7 cm then construct a triangle similar to it , whose

- : sides are

- : 6

- : 7

- : of the corresponding sides of the first triangle.(

- :)

- : 5.

- : Construct a triangle of sides 5cm,6 cm and 7 cm. then construct a triangle similar to it ,

- : whose sides

- : are 1

- : 5

- : 6

- : times the corresponding sides of the first triangle.(

- :)
- : 6.
- : A BCD is a trapezium with A B
- : !
- D C,; D C,
- D C,; the diagonals A C and B D are intersecting at E .
- D C,; If
- D C,; A E D is similar to
- B C E ,; B C E ,
- B C E ,; then prove that A D =
- B C. (: B C. (
- B C. (:)
- B C. (: 7.
- B C. (: A BCD is a trapezium, in which A B
- B C. (: !
- B C. (: D C and
- B C. (: its diagonals intersect each other at a point
- B C. (: \angle
- \angle »: \angle »
- L: L
- \angle $\frac{1}{4}$: \angle $\frac{1}{4}$
- \angle $\frac{1}{2}$: \angle $\frac{1}{2}$
- \angle $\frac{1}{2}$: . (
- \angle $\frac{1}{2}$: ; May 20 22

- È $\frac{1}{2}$:)
- È $\frac{1}{2}$: 8.
- È $\frac{1}{2}$: Con st ruct an eq uil ateral tri ang l eXYZ o fs id e 5 cm
- È $\frac{1}{2}$: and co nst ruct
- È $\frac{1}{2}$: anot h er tri an gl e si mi l ar to
- È $\frac{1}{2}$: XYZ ,each
- È $\frac{1}{2}$: o fi ts sides is
- È $\frac{1}{2}$: 8
- È $\frac{1}{2}$: 9
- È $\frac{1}{2}$: o f thesi d es o f
- XYZ .(: XYZ .(
- XYZ .(:)
- A: A
- B: B
- C: C
- D: D
- E: E
- P: P
- Q: Q
- X: X
- R: R
- Y: Y
- A: A
- B: B

- C: C
- D: D
- SIM IL AR TR IANG LE S: SIM IL AR TR IANG LE S
- A: A
- D: D
- E: E
- C: C
- C: d
- B: B
- B: d
- B: M arch 201 5 to
- B: r t
- B: 4
- B: t
- UN E: UN E
- UN E: ĩ t r t
- UN E: 4
- UN E: 9.
- UN E: Con st ruct at riangl e
- UN E: A BCi n
- UN E: w hi ch AB =5 cm, BC= 7cm and
- A BC =: A BC =
- A BC =: 50
- A BC =: 0

- $\triangle ABC \sim \triangle DEF$, then
- $\triangle ABC \sim \triangle DEF$: construct
- $\triangle ABC \sim \triangle DEF$: a triangle similar to it, whose sides are
- $\angle A = \angle D$
- $\angle B = \angle E$
- $\angle C = \angle F$ of the corresponding sides of first triangle.
- $\angle A = \angle D$ (
- $\angle B = \angle E$)
- $\angle C = \angle F$ 10.
- $\triangle ABC$: Construct a triangle PQR, in which $PQ = 4$ cm, $QR = 6$ cm and
- $\angle A = 60^\circ$
- $\angle PQR = 70^\circ$: $\angle PQR = 70^\circ$
- $\angle PQR = 70^\circ$: 0°
- $\angle PQR = 70^\circ$: Construct
- $\angle PQR = 70^\circ$: triangle such that each side of the new triangle is
- $\angle A = 60^\circ$
- $\angle A = 60^\circ$
- $\angle A$: of the triangle PQR. (
- $\angle A$:)
- $\angle A$: 11.
- $\angle A$: In a
- $\angle A$: right
- $\angle A$: -
- $\angle A$: angle

- Y: triangle, the hypotenuse is 10 cm more than the shortest side. If the third side is
- Y: 6 cm less than the hypotenuse, find the sides of the
- Y: right
- Y: -
- Y: angle
- Y: triangle. (
- Y:)
- Y: 12.
- Y: In a
- Y: right
- Y: -
- Y: angle
- Y: triangle, the length of the hypotenuse is 6
- Y: cm more
- Y: than its shortest side. The
- Y: length of the other side is 3 cm less than the hypotenuse, then find the sides of
- Y: right
- Y: -
- Y: angle
- Y: triangle.
- Y: (
- Y:)
- Y: 13.
- Y: In the given figure XY

- A: A

- A: Q R an d YZ

- A: A

- A: RS, t h en p r o v e t h a t

- A: p

- A: p ÿ

- L: L

- L: p

- L: p

- L: .

- L: (

- L: A ug 22

- L:)

- L: 14.

- L: C o n s t r u c t t r i a n g l e A B C w i t h B C = 7 c m ,

- L: á

- B = 4 5: B = 4 5

- B = 4 5: °

- B = 4 5: a n d

- B = 4 5: á

- C = 6 0°.: C = 6 0°.

- C = 6 0°.: 7

- C = 6 0°.: 9

- C = 6 0°.: t i m e s

- $C = 60^\circ$: 15.
- $C = 60^\circ$: Construct triangle ABC with $AB = 5.6$
- $C = 60^\circ$: cm
- ,BC = 7.2: ,BC = 7.2
- ,BC = 7.2: cm
- ,BC = 7.2: and $CA = 4.8$
- ,BC = 7.2: cm
- ,BC = 7.2: .Construct
- ,BC = 7.2: another triangle similar to triangle ABC, whose sides are
- \ddot{U} : \ddot{U}
- \mathfrak{P} : \mathfrak{P}
- \mathfrak{P} : times of the corresponding sides
- \mathfrak{P} : of triangle ABC.
- \mathfrak{P} : 16.
- \mathfrak{P} : cm
- ,AC = 6: ,AC = 6
- ,AC = 6: cm
- ,AC = 6: and $BC = 8$
- ,AC = 6: cm
- ,AC = 6: .Construct another triangle
- ,AC = 6: 6
- ,AC = 6: 7
- ,AC = 6: Part
- ,AC = 6: -

- ,A C =6: b
- ,A C =6: 1.
- ,A C =6: Wh en w e con st ru ct at riang le si mil arto agi v en t ri ang le asp er
- ,A C =6: g iv en scal e facto r,we
- ,A C =6:)
- A.: A.
- A.: SSSs imil ari ty
- B.: B.
- B.: A AA s i mil ari ty
- C.: C.
- C.: Basi c prop orti on al ity t h eo rem
- D.: D.
- D.: A and Care co rrect
- D.: .
- D.: 2.
- D.: If
- D.: \angle
- ABC: ABC
- ABC: \angle
- ABC: E DC,t hen whi ch oft h e fol low ing rep resent at ion of figures is tru e?
- ABC: (
- ABC:)
- ABC: 3.
- ABC: If

- ABC ~: ABC ~
- ABC ~: D EF and area
- ABC ~: ABC : area
- ABC ~: DE F =4 9 : 100 .Then DE : AB =
- ABC ~: (
- ABC ~:)
- A.: A.
- A.: 9 :1 0
- B.: B.
- B.: 1 0 : 7
- C.: C.
- C.: 1 0 : 9
- D.: D.
- D.: 7 :1 0
- SIM IL AR TR IANG LE S: SIM IL AR TR IANG LE S
- P: P
- Q: Q
- S: S
- R: R
- X: X
- Y: Y
- Z: Z
- Z: (
- Z:)

- A: A

- B: B

- C: C

- D: D

- E: E

- A.: A.

- E: E

- A: A

- B: B

- C: C

- D: D

- D.: D.

- A: A

- B: B

- D: D

- E: E

- C: C

- B.: B.

- E: E

- A: A

- B: B

- C: C

- D: D

- C.: C.

- C.: March 2015 to
- C.: r t
- C.: 4
- C.: t
- UN E: UN E
- UN E: i t r t
- UN E: 4
- UN E: 4.
- UN E: O bs erv et he fol low ing :
- UN E: (
- UN E:)
- UN E: i)
- UN E: A ny two si mi lar figu res are con g ru ent .
- UN E: i i)
- UN E: A ny two co ng ru ent fig u res are si mi l ar.
- UN E: Wh i ch of th e fo llo win g i s t ru e?
- A.: A.
- A.: O nly (i) i s t ru e
- B.: B.
- B.: O nly
- B.: (ii) is tru e
- C.: C.
- C.: Bo th (i) and (i i) are tru e
- D.: D.

- D.: Both (i) and (ii) are false

- D.: 5.

- D.: In a trapezium

- D.: ABCD, if AD

- D.: æ

- D.: (

- D.:)

- A.: A.

- B. C. D.: B. C. D.

- B. C. D.: 6.

- B. C. D.: ABC is a right

- B. C. D.: -

- B. C. D.: angles and

- B. C. D.: á

- C = 90: C = 90

- C = 90: 0

- C = 90: , let BC =

- C = 90: a

- , CA =: , CA =

- , CA =: b

- , AB =: , AB =

- , AB =: c

- , AB =: and

- , AB =: p

- ,A B =: be th e leng th

- ,A B =: (

- ,A B =:)

- A.: A.

- A.: 5

- A.: ã

- A.: .

- L: L

- L: 5

- Ô: Ô

- Ô: .

- F: F

- F: 5

- Õ: Õ

- Õ: .

- B.: B.

- B.: 5

- B.: ã

- B.: .

- L: L

- F: F

- F: 5

- Ô: Ô

- Ô: .

- E: E

- E: 5

- Õ: Õ

- Õ: .

- C): C)

- C): 5

- C): ã

- C): .

- L: L

- L: 5

- Ô: Ô

- Ô: .

- E: E

- E: 5

- Õ: Õ

- Õ: .

- D): D)

- D): 6

- D): ã

- D): .

- L: L

- L: 5

- Ô: Ô

- Ô: .

- F: F

- F: 5

- Ö: Ö

- Ö: .

- Ö: 7.

- Ö: In arigh t

- Ö: -

- Ö: angl ed t ri ang l ewi th int egral s id es atl eas t o ne ofi ts measu rement s mus t b e

- Ö: (

- Ö:)

- A.: A.

- A.: Mul ti pl eo f 3

- B.: B.

- B.: Mul ti pl eo f 9

- C.: C.

- C.: Mul ti pl eo f 2

- D.: D.

- D.: Mul ti pl eo f 7

- D.: 8.

- D.: x

- D.: a

- D.: ,

- D.: b

- D.: and

- D.: c

- D.: in t h e fol low in g fig ure

- D.: .

- D.: (

- D.:)

- A.: A.

- A.: x

- A.: =

- Ô Ö: Ô Ö

- Ö: Ö

- Ö: >

- Ö: Ö

- B.: B.

- B.: x

- B.: =

- Ö Ö: Ö Ö

- Ö: Ö

- Ö: >

- Ö: Ö

- C.: C.

- C.: x

- C.: =

- Ö: Ö

- Ö: >

- Ö: Ö

- Ô Ö: Ô Ö

- D.: D.

- D.: x

- D.: =

- Ô Õ: Ô Õ

- Ô: Ô

- Ô: >

- Ö: Ö

- Ö: 9.

- Ö: In th e fi gu re

- A BC,D E: A BC,D E

- A BC,D E: !

- BC,AD: BC,AD

- BC,AD: = 1.5 cm,D B =6 cm,AE =

- BC,AD: x

- BC,AD: cm th en

- BC,AD: x

- BC,AD: =

- BC,AD: ____ _

- BC,AD: (

- BC,AD:)

- A.: A.

- A.: 2 .5cm

- B.: B.
- B.: 2 cm
- C.: C.
- C.: 3 cm
- D.: D.
- D.: 3.5cm
- D.: 10.
- D.: If
- PQR ~: PQR ~
- PQR ~: XYZ ,QR =3 cm, YZ =4 cm,
- PQR ~: ar
- PQR ~: .
- PQR ~: PQ R =54 cm
- PQR ~: 2
- PQR ~: .Then
- PQR ~: ar
- PQR ~: .
- X YZ =.: X YZ =.
- X YZ =.: (
- X YZ =.:)
- A.: A.
- A.: 13.5 cm
- A.: 2
- B.: B.

- B.: 4 6 cm

- B.: 2

- C.: C.

- C.: 9 6 cm

- C.: 2

- D.: D.

- D.: 1 2 cm

- D.: 2

- D.: 11.

- ABC ~: ABC ~

- ABC ~: X YZ ,AB : XY =9 : 16 ,th en

- ABC ~: ar

- ABC ~: .

- ABC ~: (

- A BC):: A BC):

- A BC):: ar

- A BC):: .

- A BC):: (

- A BC):: XYZ) is (

- A BC)::)

- A.: A.

- A.: 3 :4

- B.: B.

- B.: 4 :3

- C.: C.

- C.: 8 1 : 256

- D.: D.

- D.: 6 :8 1

- D.: 12.

- D.: In

- D.: A BCwi th

- A 90: A 90

- A 90: 0

- A 90: ; fro m A,p erp en di cu l ar AD is draw n o n BC.w hi ch on eo f th e

- A 90: fo llo win g i s NO T co rrect ?

- A 90: (

- A 90:)

- A.: A.

- ABC ~: ABC ~

- D AC: D AC

- B.: B.

- DA C ~: DA C ~

- D BA: D BA

- C.: C.

- ABC ~: ABC ~

- D BA: D BA

- D.: D.

- ABC ~: ABC ~

- D BA ~: D BA ~

- D AC: D AC

- D AC: 13.

- D AC: In th e

- D AC: ad jacen t

- D AC: fi gu re, A B =3 cm, A C =8 cm, B E =4 .5 cm, t h en CD =

- D AC: (

- D AC:)

- A.: A.

- A.: 1 0 .5 cm

- B.: B.

- B.: 9 .5 cm

- C.: C.

- C.: 1 6 cm

- D.: D.

- D.: 1 2 cm

- K: K

- L: L

- M: M

- N: N

- N: a

- N: b

- N: c

- N: x

- N: 46

- N: 0

- N: 46

- N: 0

- P: P

- B: B

- C: C

- D: D

- A: A

- E: E

- A: A

- D: D

- B: B

- C: C

- E: E

- A: A

- B: B

- C: C

- D: D

- D: D

- A: A

- B: B

- C: C

- C: C

- D: D

- A: A

- B: B

- D: D

- C: C

- B: B

- A: A

- SIM IL AR TR IANG LE S: SIM IL AR TR IANG LE S

- SIM IL AR TR IANG LE S: M arch 201 5 to

- SIM IL AR TR IANG LE S: r t

- SIM IL AR TR IANG LE S: 4

- SIM IL AR TR IANG LE S: t

- JUN E: JUN E

- JUN E: ĩ t r t

- JUN E: 4

- JUN E: 14.

- JUN E: T he pe ri met ero f two s i mil ar tri ang l es are in 4: 9 rat io ,th e rati o o f th ei r

- JUN E: co rres pon ding si des

- JUN E: i s . . . (

- JUN E:)

- A.: A.

- A.: 9 :4

- B.: B.

- B.: 2 :3

- C.: C.

- C.: 16 : 81

- D.: D.

- D.: 4 : 9

- D.: 15.

- D.: In the given figure, DE

- D.: !

- D.: BC, if

- E H: E H

- H F: H F

- H F: =

- H F: 6

- H F: 7

- H F: and EC = 3.6 cm, then AE = (

- H F:)

- A.: A.

- A.: 4.5 cm

- B.: B.

- B.: 5.6 cm

- C.: C.

- C.: 5.4 cm

- D.: D.

- D.: 4.6 cm

- D.: 16.

- D.: Ratio of areas of two similar triangles is $144 : 41$, then ratio of their perimeters is (
- D.:)
- A.: A.
- A.: $14 : 41$
- B.: B.
- B.: $44 : 41$
- C.: C.
- C.: $7 : 4$
- D.: D.
- D.: $4 : 7$
- D.: 17.
- D.: Which of the following statement is true? (
- D.:)
- A.: A.
- A.: All acute angle triangles are similar.
- B.: B.
- B.: All obtuse angle triangles are similar.
- C.: C.
- C.: All right angle triangles are similar.
- D.: D.
- D.: All isosceles right triangles are similar.
- D.: 18.
- D.: ¿
- ABC: ABC

- ABC: ý
- ABC: ě
- ABC: DE F, i f
- ABC: á
- A =4 5: A =4 5
- A =4 5: o
- A =4 5: an d
- A =4 5: á
- E = 75: E = 75
- E = 75: o
- E = 75: ,th en
- E = 75: á
- E = 75: C is
- E = 75: (
- E = 75: Ma y 20 22
- E = 75:)
- A.: A.
- A.: 90
- A.: o
- B.: B.
- B.: 1 20
- B.: o
- C.: C.
- C.: 30

- C.: o

- D.: D.

- D.: 60

- D.: o

- D.: 19.

- D.: In the given figure, $PB \perp CF$ and $DPE \perp F$, then

- D.: $m \angle p$

- D.: $p \cdot q$

- D.:)

- A.: A.

- A.: 5

- A.: 7

- B.: B.

- B.: 7

- B.: 8

- C.: C.

- C.: 5

- C.: 8

- D.: D.

- D.: 6

- D.: 7

- D.: 20.

- D.: $\frac{1}{2}$

- D.: ABC is a right triangle, right angled at B. If $AB = 9$ cm, $BC = 12$ cm, then AC is

- D.: (

- D.: May 2022

- D.:)

- A.: A.

- A.: 13

- B.: B.

- B.: 14

- C.: C.

- C.: 15

- D.: D.

- D.: 16

- D.: 21.

- D.: In

- D.:

- A BC, D E: A BC, D E

- A BC, D E: BC, A D = 6cm, D B = 2 cm, D E = 9 cm and BC =

- A BC, D E: x

- A BC, D E: cm, then the value of

- A BC, D E: x

- A BC, D E: is

- A.: A.

- A.: 6

- B.: B.

- B.: 8

- C.: C.

- C.: 9

- D.: D.

- D.: 12

- D.: 22.

- D.: A mong the follo wing, the pair of triangles which are always similar is

- D.: (

- D.:)

- A.: A.

- A.: two isosceles triangles .

- B.: B.

- B.: two scalene triangles .

- C.: C.

- C.: two equilateral triangles .

- D.: D.

- D.: two right

- D.: -

- D.: angled triangles .

- D.: 23.

- D.: Corresponding sides of two similar triangles are in the ratio 2: 3. If the area of the smaller

- D.: triangle is 48

- D.: cm

- D.: 2

- D.: , then the area of the larger triangle is . . .

- D.: (
- D.:)
- A.: A.
- A.: 1 08
- A.: cm
- A.: 2
- B.: B.
- B.: 72
- B.: cm
- B.: 2
- C.: C.
- C.: 36
- C.: cm
- C.: 2
- D.: D.
- D.: 90
- D.: cm
- D.: 2
- D.: 24.
- A +: A +
- A +: C= 110 °, th en
- Q =: Q =
- Q =: ____ _
- Q =: (

- Q =:)

- Q =: .

- A.: A.

- A.: 1 10 °

- B.: B.

- B.: 9 0°

- C.: C.

- C.: 7 0°

- D.: D.

- D.: 2 0°

- A: A

- D: D

- B: B

- C: C

- E: E

- A: A

- B: B

- B: 2

- B: 8

- C: C

- F: F

- E: E

- D: D

- P: P

- A: A
- D: D
- D: d
- E: E
- C: C
- C: d
- B: B
- B: d
- B: 6
- B: 2
- B: 9
- B: d
- B: x
- SIM IL AR TR IANG LE S: SIM IL AR TR IANG LE S
- SIM IL AR TR IANG LE S: M arch 201 5 to
- SIM IL AR TR IANG LE S: r t
- SIM IL AR TR IANG LE S: 4
- SIM IL AR TR IANG LE S: t
- JUN E: JUN E
- JUN E: ĩ t r t
- JUN E: 4
- JUN E: 25.
- JUN E: In
- JUN E: A BCDE || BCwh ereAD =2

- JUN E: cm
- ,D B= 3: ,D B= 3
- ,D B= 3: cm
- ,D B= 3: and AE =4
- ,D B= 3: cm
- ,D B= 3: .th en ACi s _ _
- A.: A.
- A.: 5
- A.: cm
- B.: B.
- B.: 10
- B.: cm
- C.: C.
- C.: 6
- C.: cm
- D.: D.
- D.: 9
- D.: cm
- D.: 26.
- D.: 2
- = AB: = AB
- = AB: 2
- +A C: +A C
- +A C: 2

- +A C: th en . _ _ _ i s t h e R i g h t a n g l e.

- A.: A.

- A: A

- B.: B.

- B: B

- C.: C.

- C: C

- D.: D.

- D.: N on e

- D.: 27.

- ABC: ABC

- ABC: ý

- PQ R,: PQ R,

- PQ R,: á

- Q +: Q +

- Q +: á

- R =1 30: R =1 30

- R =1 30: t h en

- R =1 30: á

- A = _ _ _ : A = _ _ _

- A.: A.

- A.: 6 0°

- B.: B.

- B.: 15

- B.: 0°
- C.: C.
- C.: 50
- C.: $^\circ$
- D.: D.
- D.: 1
- D.: 30°
- D.: Tangents and secantsto the
- D.: circles
- A: 1.
- A: The radius of asphericalballoon increases from7
- A: cm
- A: to 14
- A: cm
- A: as air pumped into it .Find the
- A: ratio of the volumes of theballoon beforeand after pumping the air .
- A: (
- A:)
- A: 2.
- A: Find the volume and surface area of asphere of radius 42
- A: cm
- A: @
- A: è
- L: L

- L: 6 6

- L: ;

- A: A

- A: .

- A: ((

- A:)

- A: 3.

- A: A solid metallic ball of volume

- A: 64

- A: cm

- A: 3

- A: melted and made into solid cube. Find the side of the

- A: solid cube.

- A: (

- A:)

- A: 4.

- A: A toy is in the form of a cone mounted on a hemisphere. The radius of the base and the height

- A: of the cone are 7

- A: cm

- A: and 8

- A: cm

- A: respectively. Find the surface area of the toy.

- A: (

- A:)

- A: 5.
- A: The diameter
- A: of solid sphere is 6
- A: cm
- A: .It is melted and recast into solid cylinder of height 4
- A: cm
- A: .Find the radius of cylinder. (
- A:)
- A: 6.
- A: The height and the base radius of a Cone and a Cylinder are equal to the radius of a Sphere. Find
- A: the ratio of their
- A: volumes. (
- A:)
- A: (
- A:)
- A: (
- A:)
- MENSURATION: MENSURATION
- MENSURATION: March 2015 to
- MENSURATION: r t
- MENSURATION: 4
- MENSURATION: t
- JUNE: JUNE
- JUNE: i t r t

- JUN E: 4
- JUN E: 7.
- JUN E: T hedi amet ero fth ebas eofarig ht ci rcul arcon eis 12
- JUN E: cm
- JUN E: and vo lu me376 .8
- JUN E: cm
- JUN E: 3
- JUN E: .Fi nd it s h eight
- JUN E: (
- N: N
- N: = 3.14)
- N: (
- N:)
- N: 8.
- N: A righ t ci rcu lar cy li nd erh as radi us 3 .5
- N: cm
- N: and hei ght 14
- N: cm
- N: .Find curv ed su rface area. (
- N:)
- E: 1.
- E: Sh ow t h at $(1 + \cot$
- E: 2
- E: à

- E:) (1

- E: -

- E: c os

- E: à

- E:) (1 +c os

- E: à

- E:) = 1

- E: .

- E: (

- E:)

- E: 2.

- E: Sh ow t h at

- E: $\frac{3}{4}$

- O A: O A

- O A: ?

- O A: 6

- O A: à

- E: E

- ? K O A: ? K O A

- ? K O A: ?

- ? K O A: 6

- ? K O A: à

- ? K O A: = tan

- ? K O A: à

- ? K O A: +cot
- ? K O A: à
- ? K O A: .
- ? K O A: (
- ? K O A:)
- ? K O A: 3.
- ? K O A: Prov e th at
- ? K O A: §
- ? K O A: 5
- ? K O A: ?
- ? K O A: q g l
- ? K O A:
- ? K O A: 5
- ? K O A: >
- ? K O A: q g l
- ? K O A:
- ? K O A: = s ec
- ? K O A: à
- ? K O A: tan
- ? K O A: à
- ? K O A: ,
- ? K O A: (wh ere
- ? K O A: à
- ? K O A: i s acute)

- ? K O A: .
- ? K O A: ((
- ? K O A:)
- ? K O A: 4.
- ? K O A: If $\tan (A + B) = 1$ and $\cos (A$
- $B) =: B) =$
- $B) =: \frac{3}{4}$
- $B) =: 7$
- $B) =: 6$
- $B) =: , 0$
- $B) =: 0$
- $< A + B < 90: < A + B < 90$
- $< A + B < 90: 0$
- $< A + B < 90: \text{ and } A > B; \text{ find } A \text{ and } B.$
- $< A + B < 90: ($
- $< A + B < 90:)$
- $< A + B < 90: 5.$
- $< A + B < 90: \text{ If}$
- $< A + B < 90: x$
- $< A + B < 90: =$
- $< A + B < 90: a$
- $< A + B < 90: \text{ sec}$
- E: E
- E: a

- E: nd
- E: y
- E: =
- E: b
- E: t an
- E: E
- E: ,th en prov e that
- E: ë
- E: .
- Ô: Ô
- Ô: .
- Ô: ì
- Ô: .
- Õ: Õ
- Õ: .
- Õ: = 1
- Õ: .
- Õ: ((
- Õ:)
- Õ: 6.
- Õ: Prov e th at
- Õ: §
- Õ: Ö â æ Ø Ö °
- Õ: >

- \tilde{O} : 5

- \tilde{O} : $\ddot{O} \hat{a} \text{æ} \emptyset \ddot{O}$

- \tilde{O} : $^{\circ}$

- \tilde{O} : ?

- \tilde{O} : 5

- F: F

- F: \S

- F: $\ddot{O} \hat{a} \text{æ} \emptyset \ddot{O}^{\circ}$

- F: ?

- F: 5

- F: $\ddot{O} \hat{a} \text{æ} \emptyset \ddot{O}$

- F: $^{\circ}$

- F: >

- F: 5

- F: $= 2\cos tA$ (

- F:)

- F: 7.

- F: If A ,B,C are i nt erio rang l es of

- A BC, : A BC,

- A BC, : t h en sho w t hat

- O E J: O E J

- O E J: @

- O E J: $^{\circ}$

- O E J: >

- O E J: »
- O E J: 6
- A: A
- E: E
- ? K O: ? K O
- ? K O: @
- ? K O: °
- ? K O: >
- ? K O: »
- ? K O: 6
- A: A
- A: =
- ? K O: ? K O
- ? K O: $\frac{1}{4}$
- ? K O: 6
- E: E
- O E J: O E J
- O E J: $\frac{1}{4}$
- O E J: 6
- O E J: . (
- O E J:)
- O E J: 8.
- O E J: Wh at can y ou say
- O E J: abo ut th ev alu es of si n

- O E J: A and co s

- A: A

- A: as th e measu reo f an ang le A

- A: i n creas es fro m 0 °t o 9 0°? (

- A:)

- A: 9.

- A: Fi nd th e measu reo f th e an gl es A and B, ifco s (A

- B) =: B) =

- B) =: $\frac{3}{4}$

- B) =: 7

- B) =: 6

- B) =: an d sin (A +B) =

- B) =: $\frac{3}{4}$

- B) =: 7

- B) =: 6

- B) =: . (

- B) =:)

- B) =: 10.

- B) =: If cos ec (A +B) =1 an d cot (A

- B) =: B) =

- B) =: $\frac{3}{4}$

- B) =: u

- B) =: , 0

- B) =: 0

- B) =: 0

- B) =: ,A >B, then find A and B.

- B) =: 11.

- B) =: Find the value of

- B) =:

- \hat{U} : \hat{U}

- \hat{U} : β

- \hat{U} : \hat{U}

- \hat{U} : \hat{U}

- \hat{U} : $>$

- \hat{U} :

- \hat{U} : \hat{U}

- \hat{U} : \hat{U}

- \hat{U} : \hat{U}

- \hat{U} : \hat{U}

- \hat{U} :

- \hat{U} : \hat{U}

- \hat{U} : \hat{U}

- \hat{U} : \hat{U}

- \hat{U} : \hat{U}

- \hat{U} : $>$

- :

- \hat{U} : \hat{U}

- \hat{U} : β

- Ú: Ú

- Ú: Ú

- Ú: (

- Ú:)

- Ú: 12.

- Ú: Prove that

- Ú: 5

- Ú: æ Ü á

- Ú: .

- Ú:

- Ú: cot

- Ú: 2

- Ú: =1

- Ú: (

- Ú:)

- Ú: 13.

- Ú: In an acute angled triangle ABC, if $\sin(A + B$

- C) =: C) =

- C) =: 5

- C) =: 6

- C) =: and $\cos(B + C$

- A) =: A) =

- A) =: 5

- A) =: 6

- A) =: ,t h en fi nd

- A ,: A ,

- A ,: B an d

- C: C

- C: 14.

- C: Prov e th at

- C: q g l

- C:

- C: 5

- C: >

- C: Ö â æ

- :

- : +

- : 5

- : >

- : Ö â æ

- :

- : q g l

- :

- : =

- : 2 cos ec

- : 15.

- : Pro ve th at

- : 5

- : >

- : q g l

- :

- : 5

- :

- : q g l

- :

- : =

- : 2

- : 4

- : MARKS

- : 1.

- : Find the value of

- : q c a

- : 5 9

- : ,

- : a q a

- : ; 9

- : ,

- E: E

- E: q g l

- E: ; 6

- E: ,

- E: a m q

- E: 5 <

- E: ,

- F: F

- F: r _ l

- F: 7 7

- F: ,

- F: a m r

- F: 9 ;

- F: ,

- F: . (

- F:)

- F: 2.

- F: lf cot

- F: à

- F: =

- F: =

- F: 5 6

- F: ,t h en findt h e valu e of

- F: æ Ü á

- :

- : >

- : a m q

- :

- : æ Ü á

- :

- : ?

- : a m q

- :

- E: E

- E: æ Ø Ö

- :

- : >

- : a m q c a

- :

- : æ Ø Ö

- :

- : ?

- : a m q c a

- :

- : .

- : (

- :)

- : (

- : 8

- :)

- TRIGO NO ME TRY: TRIGO NO ME TRY

- TRIGO NO ME TRY: M arch 201 5 to

- TRIGO NO ME TRY: r t

- TRIGO NO ME TRY: 4

- TRIGO NO ME TRY: t

- JUN E: JUN E

- JUN E: ĩ t r t

- JUN E: 4

- JUN E: 3.

- JUN E: E valu at e :

- JUN E: r _ l

- JUN E: .

- JUN E: : 4

- JUN E: ,

- JUN E: >

- JUN E: 8

- JUN E: a m q

- JUN E: .

- JUN E: 8 9

- JUN E: ,

- JUN E: >

- JUN E: 7

- JUN E: q c a

- JUN E: .

- JUN E: 7 4

- JUN E: ,

- JUN E: >

- JUN E: 9
- JUN E: a m q
- JUN E: .
- JUN E: = 4
- JUN E: ,
- JUN E: a m q c a
- JUN E: 7 4
- JUN E: ,
- JUN E: >
- JUN E: q c a
- JUN E: : 4
- JUN E: ,
- JUN E: a m r
- JUN E: .
- JUN E: 7 4
- JUN E: ,
- JUN E: (
- JUN E:)
- JUN E: 4.
- JUN E: If
- JUN E: q g l
- :
- : 5
- : ?

- : a m q

- :

- E: E

- E: q g l

- :

- : 5

- : >

- : a m q

- :

- L: L

- L: v

- L: (0

- L: 0

- L: <

- L: à

- L: < 90

- L: 0

- L:) , then find the value of

- L: à

- L: . (

- L:)

- L: 5.

- L: Prove that

- L: :

- L: s

- E: E

- P = J: P = J

- P = J: 6

- P = J: à

- P = J: ;

- E: E

- E: @

- E: s

- E: E

- E: 5

- E: ç Ô á

- E: .

- E:

- A: A

- L: L

- L: 5

- L: æ Ü á

- L: .

- L:

- L: ?

- L: æ Ü á

- L: 0

- L:

- L: (
- L:)
- L: 6.
- L: If
- L: Ö â æ
- L: Ö â æ
- L: L
- l: l
- l: á
- l: Ö â æ
- l: æ Ü á
- L: L
- J: J
- J: á
- J: t h e n s h o w t h a t (
- J: m
- J: 2
- J: +
- J: n
- J: 2
- J:) c o s
- J: 2
- Û: Û
- Û: =

- $\dot{U}: m$
- $\dot{U}: 2$
- $\dot{U}: n$
- $\dot{U}: 2$
- $\dot{U}: .$
- $\dot{U}: ($
- $\dot{U}:)$
- $\dot{U}: 7.$
- $\dot{U}: \text{If cos ec}$
- $E: E$
- $E: +$
- $E: \text{co t}$
- $E: E$
- $E: =$
- $E: k$
- $E: , \text{t h en w rit e al l t rigo nomet ri c rat ios at}$
- $E: E$
- $E: \text{i n terms o f}$
- $E: k$
- $E: . ($
- $E:)$
- $E: 8.$
- $E: \text{Prov e th at}$
- $E: \text{a m q}$

- E: °

- E: 5

- E: ?

- E: r _ l

- E: °

- E: E

- E: q g l

- E: °

- E: 5

- E: ?

- E: a m r

- E: °

- E: = sinA + cos A (

- E:)

- E: 9.

- E: Sh ow

- E: th at (sec

- E:

- E: -

- E: tan

- E:

- E:)

- E: 2

- E: =

- E: 5

- E: ?

- E: æ Ü á

- E: 5

- E: >

- E: æ Ü á

- E: (

- E:)

- E: 10.

- E: Prov e th at

- E: §

- Ú: Ú

- Ú: ?

- Ú: Â

- Ú: Ú

- Ú: >

- Ú: Â

- Ú: = sec

- E: E

- E: t an

- E: E

- E: (

- E:)

- E: 11.

- E: Show that
- E: $\ddot{O} \hat{=} \text{æ}$
- E: 5
- E: ?
- E: $\text{æ} \ddot{U} \acute{a}$
- E: E
- E: 5
- E: ?
- E: $\text{æ} \ddot{U} \acute{a}$
- E: $\ddot{O} \hat{=} \text{æ}$
- E: = 2sec
- E: à
- E: (
- E:)
- E: 12.
- E: If $\cos ecA =$
- E: $\frac{3}{4}$
- E: t
- E: ,then find the value of
- E: 6
- E: $\text{æ} \ddot{U} \acute{a}$
- E: .
- E: °
- E: >

- E: 7

- E: Ö â ç

- E: .

- E: °

- E: 8

- E: :

- E: ç Ô á

- E: .

- E: °

- E: ?

- E: Ö â æ

- E: .

- E: °

- E: ;

- E: .

- E: (

- E:)

- E: 13.

- E: If se c

- E: E

- E: +t an

- E: E

- E: = P, th en th at s in

- E: E

- E: =

- É: É

- É: .

- É: ?

- É: 5

- É: É

- É: .

- É: >

- É: 5

- É: .

- É: (

- É: Ma y 2022

- É:)

- É: 14.

- É: Sh ow t h at

- É: 5

- É: >

- É: æ Ü á

- É: Ö â æ

- E: E

- E: Ö â æ

- E: 5

- E: >

- E: æ Ü á

- E: =

- E: 2 s ec

- E: à

- E: (

- E:)

- PART: PART

- PART: -

- B: B

- B: 1.

- B: If cot A =

- B: 9

- B: 5 6

- B: (

- B:)

- A.: A.

- Ú: Ú

- Ú: à

- Ú: Ú

- Ü: Ü

- B.: B.

- Ú: Ú

- Ô: Ô

- Ú: Ú

- Ü: Ü

- C.: C.

- Þ: Þ

- Ú: Ú

- Ü: Ü

- D.: D.

- Ô: Ô

- Ù: Ù

- Ó: Ó

- Ü: Ü

- Ü: 2.

- Ü: Which of the following values is not a possible value of x?

- Ü: (

- Ü:)

- A.: A.

- Ü: Ü

- Ý: Ý

- B.: B.

- B.: 7

- B.: 9

- C.: C.

- C.: 8

- C.: 9

- D.: D.

- D.: 9

- D.: 8
- D.: 3.
- D.: Which of the following is NOT defined?
- D.: (
- D.:)
- A.: A.
- A.: Tan 0
- A.: 0
- B.: B.
- B.: Tan 90
- B.: 0
- C.: C.
- C.: Cot 90
- C.: 0
- D.: D.
- D.: Sec 0
- D.: 0
- D.: 4.
- D.: If sin
- A =: A =
- A =: 6 8
- A =: 6 9
- A =: (
- A =:)

- A.: A.

- A.: 6 9

- A.: 6 8

- B.: B.

- B.: ;

- B.: 6 8

- C.: C.

- C.: 6 8

- C.: ;

- D.: D.

- D.: 6 9

- D.: ;

- D.: 5.

- D.: If sin

- D.: à

- D.: =c os

- D.: à

- D.: , w h ere 0

- D.: 0

- D.: <

- D.: à

- D.: < 90

- D.: 0

- D.: ,th en t an

- D.: à

- D.: +c ot

- D.: à

- D.: L å

- D.: (

- D.:)

- A.: A.

- A.: 2

- A.: $\frac{3}{4}$

- A.: u

- B.: B.

- B.: 6

- B.: $\frac{3}{4}$

- B.: 7

- C.: C.

- C.: 2

- D.: D.

- D.: 1

- TRIGO NO ME TRY: TRIGO NO ME TRY

- TRIGO NO ME TRY: M arch 201 5 to

- TRIGO NO ME TRY: r t

- TRIGO NO ME TRY: 4

- TRIGO NO ME TRY: t

- JUN E: JUN E

- JUN E: ï t r t
- JUN E: 4
- JUN E: 6.
- JUN E: If se c
- JUN E: à
- JUN E: +t an
- JUN E: à
- JUN E: =3,th en sec
- JUN E: à
- JUN E:
- JUN E: t an
- JUN E: à
- JUN E: L å å å å ä ä
- JUN E: (
- JUN E:)
- A.: A.
- A.: 5
- A.: 7
- B.: B.
- B.: 6
- B.: 7
- C.: C.
- C.: 8
- C.: 7

- D.: D.
- D.: 9
- D.: 7
- D.: 7.
- D.: $\ln a$
- D.: ζ
- $A \cdot BC, A \cdot B =: A \cdot BC, A \cdot B =$
- $A \cdot BC, A \cdot B =: c$
- $,BC =: ,BC =$
- $,BC =: a$
- $,A \cdot C =: ,A \cdot C =$
- $,A \cdot C =: b$
- $,A \cdot C =: \text{and}$
- $,A \cdot C =: \acute{a}$
- $BA \cdot C =: BA \cdot C =$
- E: E
- E: ,t h en area o f
- E: ζ
- E: (
- E:)
- A.: A.
- A.: 5
- A.: 6
- A.: ab

- A.: s in

- A.: à

- B.: B.

- B.: 5

- B.: 6

- B.: ca

- B.: sin

- B.: à

- C.: C.

- C.: 5

- C.: 6

- C.: bc

- C.: sin

- C.: à

- D.: D.

- D.: 5

- D.: 6

- D.: b

- D.: 2

- D.: s in

- D.: à

- D.: 8.

- D.: T he valu e of

- E: E

- E: i n t e r m s o f c o s e c

- E: à

- E: å å ä ä

- E: (

- E:)

- A.: A.

- Ú: Ú

- Ú: ¥

- :

- Ô: Ô

- :

- : ?

- Ú: Ú

- B.: B.

- :

- :

- : ä

- : ¥

- :

- Ô: Ô

- :

- : ?

- Ú: Ú

- C.: C.

- \hat{U} : \hat{U}

- :

- : \ddot{a}

- : \yen

- :

- \hat{U} : \hat{U}

- :

- : ?

- \acute{U} : \acute{U}

- D.: D.

- \hat{U} : \hat{U}

- \hat{U} : \yen

- :

- \hat{U} : \hat{U}

- :

- : ?

- \acute{U} : \acute{U}

- \acute{U} : 9.

- \acute{U} : á

- $BA\ C=90$: $BA\ C=90$

- $BA\ C=90$: 0

- $BA\ C=90$: (

- $BA\ C=90$:)

- A.: A.

- A.: 30

- A.: cm

- A.: 2

- B.: B.

- B.: 15

- B.: cm

- B.: 2

- C.: C.

- C.: 60

- C.: cm

- C.: 2

- D.: D.

- D.: 20

- D.: cm

- D.: 2

- D.: 10.

- D.: O bs erv et he fol low ing :

- I): I)

- I): Si n

- I): 2

- I): 20

- I): 0

- I): + si n

- I): 2

- I): 70

- I): 0

- = 1 II): = 1 II)

- = 1 II): 6

- = 1 II): { r

- = 1 II): 4

- L: L

- L: s

- L: ä

- L: Wh i ch on ei s co rrect ?

- L: (

- L:)

- A.: A.

- A.: (I) on ly .

- B.: B.

- B.: (II) on ly

- C.: C.

- C.: Bo th (I)and (II)

- D.: D.

- D.: n eith er (I)n or (II)

- D.: 11.

- D.: t an36

- D.: 0

- D.: .Tan54

- D.: 0

- D.: +s in 3 0

- D.: 0

- D.: =

- D.: (

- D.:)

- A.: A.

- A.: 7

- A.: 6

- B.: B.

- B.: 5

- B.: 6

- C.: C.

- C.: 2

- D.: D.

- D.: 6

- D.: 7

- D.: 12.

- D.: Which one of the following is not defined ?

- D.: (

- D.:)

- A.: A.

- A.: Sin 90

- A.: 0

- B.: B.

- B.: $\cos 0$

- B.: 0

- C.: C.

- C.: $\sec 90$

- C.: 0

- D.: D.

- D.: $\cos 90$

- D.: 0

- D.: 13.

- D.: If $\sin A =$

- D.: 6 8

- D.: 6 9

- D.: ,

- D.: then $\sec A =$

- D.:

- D.: (

- D.:)

- A.: A.

- A.: ;

- A.: 6 9

- B.: B.

- B.: 6 9

- B.: ;

- C.: C.

- C.: 6 8

- C.: ;

- D.: D.

- D.: ;

- D.: 6 8

- D.: 14.

- D.: §

- D.: 5

- D.: ?

- D.: Ö â æ

- D.: .

- D.: °

- D.: 5

- D.: >

- D.: Ö â ç

- D.: .

- D.: °

- D.: =

- D.: (

- D.:)

- A.: A.

- A.: Si n A

- B.: B.

- B.: $\frac{3}{4}$
- O E J #: O E J #
- C.: C.
- C.: Si n
- C.: 2
- A: A
- D.: D.
- D.: Si n
- D.: 4
- A: A
- A: 15.
- A: If cot
- E: E
- E: co sec
- E: E
- E: = p, th en co t
- E: + cos ec
- E: = (
- E:)
- A.: A.
- A.: 5
- A.: ã
- B.: B.
- F: F

- F: 5
- F: \tilde{a}
- C.: C.
- C.: p
- D.: D.
- D.: p
- D.: 16.
- D.: t an
- E: E
- E: i n t e r m s o f c o s
- E: E
- E: i s
- E: (
- E:)
- A.: A.
- A.: .
- A.: $\frac{3}{4}$
- A.: 5
- A.: >
- A.: $\ddot{O} \hat{a} \text{ } \text{æ}$
- A.: .
- A.:
- A.: $\ddot{O} \hat{a} \text{ } \text{æ}$
- B.: B.

- B.: Ö â æ

- B.: $\frac{3}{4}$

- B.: 5

- B.: >

- B.: Ö â æ

- B.: .

- B.:

- C.: C.

- C.: $\frac{3}{4}$

- C.: 5

- C.: ?

- C.: Ö â æ

- C.: .

- C.:

- C.: Ö â æ

- D.: D.

- D.: Ö â æ

- D.: $\frac{3}{4}$

- D.: 5

- D.: ?

- D.: Ö â æ

- D.: .

- D.:

- D.: 17.

- D.: 2

- D.: 2s in

- D.: 2

- D.: 60

- D.: 0

- D.: = (

- D.:)

- A.: A.

- A.: s in 60

- A.: 0

- B.: B.

- B.: t an 60

- B.: 0

- C.: C.

- C.: co s 60

- C.: 0

- D.: D.

- D.: s ec 60

- D.: 0

- D.: 18.

- D.: T he valu e of cos 15

- D.: 0

- X: X

- X: co s 4 5

- X: 0

- X: X

- X: $2\cos 75^\circ$

- X: 0

- X: is (

- X:)

- A.: A.

- A.: 6

- A.: $\frac{3}{4}$

- A.: 7

- B.: B.

- B.: $\frac{3}{4}$

- B.: 7

- B.: 6

- C.: C.

- C.: 5

- C.: $\frac{3}{4}$

- C.: 7

- D.: D.

- D.: $\frac{3}{4}$

- D.: t

- TRIGO NO ME TRY: TRIGO NO ME TRY

- TRIGO NO ME TRY: March 2015 to

- TRIGO NO ME TRY: r t

- TRIGO NO ME TRY: 4
- TRIGO NO ME TRY: t
- JUN E: JUN E
- JUN E: ĩ t r t
- JUN E: 4
- JUN E: 19.
- JUN E: Cho os e th e co rrect fig u re for wh ich s in A=
- JUN E: 9
- JUN E: 5 7
- JUN E: (
- JUN E:)
- A.: A.
- B.: B.
- C.: C.
- D.: D.
- D.: 20.
- D.: Sec
- E: E
- E: = (
- E:)
- A.: A.
- A.: $\frac{3}{4}$
- A.: s
- F: F

- ? K O: ? K O

- ? K O: 6

- ? K O: à

- B.: B.

- B.: $\frac{3}{4}$

- B.: s

- F: F

- P = J: P = J

- P = J: 6

- P = J: à

- C.: C.

- C.: T an

- C.: 2

- C.: -

- C.: 1

- D.: D.

- D.: §

- D.: 5

- D.: 5

- D.: ?

- D.: æ Ü á

- D.: .

- D.:

- D.: 21.

- D.: If se c
- E: E
- E: +t an
- E: E
- E: =
- E: x
- E: ,then sec
- E: E
- E:)
- A.: A.
- A.: ë
- A.: .
- A.: >
- A.: 5
- A.: ë
- B.: B.
- B.: ë
- B.: .
- B.: >
- B.: 5
- B.: 6
- B.: ë
- C.: C.
- C.: ë

- C.: .
- C.: ?
- C.: 5
- C.: 6
- C.: \ddot{e}
- D.: D.
- D.: \ddot{e}
- D.: .
- D.: ?
- D.: 5
- D.: \ddot{e}
- D.: 22.
- D.: If sin
- E: E
- E: =
- E: 7
- E: 9
- E: ,t h en th e val ue of cos
- E: E
- E: is (
- E: E
- E: is acut e an gl e)
- E: (
- E: Ma y 2022

- E:)
- A.: A.
- A.: 5
- A.: 9
- B.: B.
- B.: 9
- B.: 7
- C.: C.
- C.: 8
- C.: 9
- D.: D.
- D.: 6
- D.: 9
- D.: 23.
- D.: If
- E: E
- E: i s acut e,an gl e,then sin
- E: E
- E: x sec
- E: E
- E: =
- E: (
- E: Ma y 20 22
- E:)

- A.: A.
- A.: t an
- E: E
- B.: B.
- B.: co t
- E: E
- C.: C.
- C.: 1
- D.: D.
- D.: Co sec
- E: E
- E: 24.
- E: Wh i ch of th e fo ll owin g i s n ot true?
- E: (
- E: Aug .2 2
- E:)
- A.: A.
- A.: s in
- E: E
- E: =
- E: $\frac{3}{4}$
- E: s
- F: F
- ? K O: ? K O

- ? K O: 6

- ? K O: à

- B.: B.

- B.: s ec

- B.: 2

- E: E

- E: t an

- E: 2

- E: E

- E: =1

- C.: C.

- C.: co s

- E: E

- E: cos ec

- E: E

- E: =1

- D.: D.

- D.: t an

- E: E

- E: cot

- E: E

- E: = 1

- E: 25.

- E: If

- E: E
- E: = 45
- E: 0
- E: ,t hen t he val ue of
- Ú: Ú
- Ú: ?
- Ú:
- Ô Â: Ô Â
- Ô Â: Ô Â
- Ô Â: i s (
- Ô Â: A ug .22
- Ô Â:)
- A.: A.
- A.: 2
- B.: B.
- B.: In fi ni ty
- C.: C.
- C.: 1
- D.: D.
- D.: 0
- D.: 26.
- D.: In ABC,B =90
- D.: 0
- D.: ,AB =1 00 cmand BC=

- D.: 1 00 cm, then the value of angle is . . . (
- D.: Aug .22
- D.:)
- A.: A.
- A.: 30
- A.: 0
- B.: B.
- B.: 60
- B.: 0
- C.: C.
- C.: 45
- C.: 0
- D.: D.
- D.: 25
- D.: 0
- D.: 27.
- D.: -
- D.: angled at C, then the value of $\cos (A + B)$ is
- D.: (
- D.:)
- A.: A.
- A.: 0
- B.: B.
- B.: 5

- B.: 6

- C.: C.

- C.: $\frac{3}{4}$

- C.: 7

- C.: 6

- D.: D.

- D.: 1

- D.: 28.

- D.: The value of

- D.: ($\sin 30^\circ + \cos 60^\circ$)

- D.: -

- D.: ($\sin 60^\circ + \cos 30^\circ$) is

- D.: (

- D.:)

- A.: A.

- A.: 0

- B.: B.

- B.: $1 + 2$

- B.: $\frac{3}{4}$

- B.: u

- C.: C.

- C.: 1

- C.: $\frac{3}{4}$

- C.: u

- D.: D.

- D.: $1 +$

- D.: $\frac{3}{4}$

- D.: u

- D.: 29.

- D.: If $\sin A = \cos B$, where A and B are acute angles, then(

- D.:)

- A.: A.

- A + B = 180°: A + B = 180°

- B.: B.

- A + B = 90°: A + B = 90°

- C.: C.

- A: A

- B = 90°: B = 90°

- D.: D.

- A = B: A = B

- A = B: 30.

- A = B: The value of sin

- A = B: 2

- A = B: $29^\circ + \sin$

- A = B: 2

- A = B: 61° is (

- A = B:)

- A.: A.

- A.: 1

- B.: B.

- B.: 2

- C.: C.

- C.: 0

- D.: D.

- D.: 1

- D.: 31.

- D.: ln

- A BC,: A BC,

- B =90: B =90

- B =90: , th en co s (A +C) =__ ____

- A.: A.

- A.: 5

- A.: 6

- B.: B.

- B.: $\frac{3}{4}$

- B.: 7

- B.: 6

- C.: C.

- C.: 1

- D.: D.

- D.: 0

- D.: 32.

- D.: 8

- D.: 9

- A.: A.

- A.: 3

- B.: B.

- B.: 4

- C.: C.

- C.: 5

- D.: D.

- D.: 9

- A: A

- B: B

- C: C

- C: 13

- C: 5

- A: A

- B: B

- C: C

- C: 13

- C: 5

- A: A

- B: B

- C: C

- C: 13

- C: 5
- C: C
- A: A
- B: B
- B: 13
- B: 5
- TRIGO NO ME TRY: TRIGO NO ME TRY
- A: A
- B: B
- C: C
- E: E
- E: M arch 201 5 to
- E: r t
- E: 4
- E: t
- JUN E: JUN E
- JUN E: ï t r t
- JUN E: 4
- JUN E: 33.
- JUN E: 5
- JUN E: æ Ø Ö
- JUN E: .
- JUN E:
- E: E

- E: 5

- E: Ö â æ Ø Ö

- E: .

- E:

- E: = ____ ____

- A.: A.

- A.: 0

- B.: B.

- B.: 1

- C.: C.

- C.: T an

- C.: 2

- D.: D.

- D.: Co t

- D.: 2

- D.: 34.

- D.: In th eg iv en figu re BC =2 0

- D.: m

- ,AC =10: ,AC =10

- ,AC =10: m

- A.: A.

- A.: 6 0°

- B.: B.

- B.: 9 0°

- C.: C.

- C.: 45°

- D.: D.

- D.: 30°

- APPLICATIONS OF TRIGONOMETRY: APPLICATIONS OF TRIGONOMETRY

- J: 1.

- J: A boat has to cross a river. It crosses the river by making an angle of 60°

- J: 0

- J: with the bank of the

- J: river due to the stream of the river and travels a distance of 450

- J: m

- J: to reach the other side of the

- J: river. Draw the diagram for this data.

- J: (

- J:)

- J: 2.

- J: A person 25

- J: m

- J: away from a cell tower observes the top of the cell tower at an angle of

- J: elevation 30° . Draw the suitable diagram for this situation. (

- J:)

- A: A

- B: B

- C: C

- TRIGO NO ME TRY: TRIGO NO ME TRY
- TRIGO NO ME TRY: /
- AP P L ICAT IO NS O F TR IG O NO ME TRY: AP P L ICAT IO NS O F TR IG O NO ME TRY
- AP P L ICAT IO NS O F TR IG O NO ME TRY: M arch 201 5 to
- AP P L ICAT IO NS O F TR IG O NO ME TRY: r t
- AP P L ICAT IO NS O F TR IG O NO ME TRY: 4
- AP P L ICAT IO NS O F TR IG O NO ME TRY: t
- JUN E: JUN E
- JUN E: ĩ t r t
- JUN E: 4
- JUN E: 3.
- JUN E: A St ate h igh w ay a lead s to foo t o f th e to wer. A Man Standi ng at th e to p o f th e to wer o bs erv es
- JUN E: a car at an angl e o f d ep ressi on o f
- E: E
- E: ,
- E: wh i ch is app ro achi ng to th e foo t o f th e to wer w ith a
- E: u ni fo rm sp eed . 6 s eco nds l at er th e angl e of d ep ressi on i s
- E: ö
- E: . Draw a di agram for t his d at a an d
- E: an al yze. (
- E:)
- E: 4.
- E: Fro m t h eto p o f th et ow ero f heig ht
- E: h m

- E: height ,
- E: Anushao observes the angles of depression of
- E: two points X and Y on the same side of the tower on the ground to be
- U: U
- U: and
- U: U
- U: Draw the
- U: suitable figure for the given information .(
- U:)
- U: 5.
- U: The angle of elevation of the top of a tower from a point on
- U: the ground , which is 50
- U: m
- U: away
- U: from the foot of the tower, is 45
- U: 0
- U: Draw the diagram for the situation .
- U: (
- U:)
- U: 6.
- U: From the top of the building the angle of elevation of the top of the cell tower is 60
- U: 0
- U: and the
- U: angle of depression to its foot is 45

- Ú: 0
- Ú: ,i ft h e dist an ce oft h ebu il din g fro mt he to wer is 3 0
- Ú: m
- Ú: ,
- Ú: d raw th e sui tabl e di ag ramt o t he gi ven d ata.(
- Ú:)
- Ú: 7.
- Ú: Fro mt h eto p o f th ebu il din g ,T he angl e ofel ev atio n o f th et op of aT V to wer is and th e an gl e
- Ú: is
- Û: Û
- Û: 0
- Û: and th e ang l eo fd ep ressi on to its (T.
- Û: V.t ow er
- Û:) fo ot is
- Ú: Ú
- Ú: 0
- Ú: .i fd is tance o ft he bu ild in g fro m
- Ú: d
- Ú: (
- Ú:)
- Ú: 8.
- Ú: T he st atu es tand s on th e top of3 mt all pedes tal .Fro m ap oi nt o n th eg ro und
- Ú: angl e of el evatio n
- Ú: o f th et op ofth e st at ue is 6 0° and fro mt h es ame p oin t t he ang leo f elevati on o f th e top

oft he

- Ú: p ed est al is 45° . Fi nd th e heig ht o f th e st at ue.

- Ú: (

- Ú: A ug .22

- Ú:)

- A: 1.

- A: T here are 12 red b al ls, 18 blu e ball s and 6 w hit e ball s i n abo x .Wh en ab al l i s d rawn at

- A: rand om from th e box , wh at is th e p ro babi lity of n ot g ett ing a red b all ?

- A: (

- A:).

- AP P LICA TIO N S O F: AP P LICA TIO N S O F

- TRIG O NO ME TRY/: TRIG O NO ME TRY/

- P: P

- RO BAB IL I TY: RO BAB IL I TY

- RO BAB IL I TY: M arch 201 5 to

- RO BAB IL I TY: r t

- RO BAB IL I TY: 4

- RO BAB IL I TY: t

- JUN E: JUN E

- JUN E: ĩ t r t

- JUN E: 4

- JUN E: 2.

- JUN E: Wh en a card is drawn from a w ell shu ffl ed deck of 52 card s ,th en find th e prob ab il ity o f NOT

- JUN E: g etti ng a

- JUN E: red

- JUN E: -

- JUN E: face

- JUN E: card .

- JUN E: (

- JUN E:)

- JUN E: 3.

- JUN E: T here are 5 red ball s , 4 green b al ls an d 6 yel low bal ls in ab ox .If ab all is sel ect ed at rand o m,

- JUN E: w hat i s t h e p ro bab il ity of n ot g ett ing a yel lo w b al l ?

- JUN E: ((

- JUN E:)

- JUN E: 4.

- JUN E: O ne card is sel ect ed fro m a w ell shu ffl ed Deck of 52 card s .Fi nd th e prob ab ili ty of get tin g a

- JUN E: red card w it h p ri menu mb er. (

- JUN E:)

- JUN E: 5.

- JUN E:)

- JUN E: Bl ood Grou p

- A: A

- B: B

- AB: AB

- O: O

- O: Number of students

- O: 10

- O: 13

- O: 12

- O: 5

- O: 6.

- O: What is the probability of a number picked from first 20 natural numbers is even composite

- O: number? (

- O:)

- O: 7.

- A: A

- A: bag contains 7 red, 5 white and 6 black balls. A ball is drawn from the bag at

- A: random;

- A: find

- A: the probability that the ball drawn is not black .

- A: (

- J: J

- J:)

- J: 8.

- J: A bag contains balls which are numbered from 1 to 50. A ball is drawn at random

- J: f

- J: from the bag ,

- J: the probability that it bears two digit number multiple of 7. (

- J:)

- J: 9.

- J: A box contains 4 red balls, 5 green balls and P white balls. If the probability of randomly

- J: picked a ball from the box to be a red ball is

- J: 5

- J: 7

- J: ,

- J: then find the number of white balls .

- J: (

- J:)

- J: 10.

- J: A bag contains 5 red, 8 white, 4 green colour balls. If a ball is

- J: selected randomly from the bag

- J: then find the probability that selected ball is (i) a green ball (ii) not a white ball .

- J: 11.

- J: A box contains four slips numbered 1, 2, 3, 4 and another box contains five slips numbered 5,

- J: 6, 7, 8, 9. If one slip is taken randomly from each box ,

- J: (i)

- J: How many number pairs are possible?

- J: (i i)

- J: What is the probability of both being odd ?

- J: (i ii)

- J: What is the probability of getting the sum of the numbers 10 ?

- J: 12.

- J: If one card is randomly selected from a well shuffled deck of cards, then find the probability
- J: of getting
- J: -
- J: (i)
- J: a face card
- J: (i i) a jack of hearts and (i ii) an ace card.
- J: (J un
- J: e
- J: 13.
- J: In a bag, there are 5 Red balls, 2 Black balls and 3 White balls. If one ball is selected
- J: randomly from the bag, then find the probability of
- J: -
- J: (i) getting a Red ball.
- J: (i i) getting not a Red ball.
- J: 14.
- J: Cards numbered 1 to 30 are put in a bag. If a card is drawn at randomly, find the probability
- J: that the drawn card is (i) Prime number (i i) a perfect square
- JUN E: 1.
- JUN E: The heights of six members of a
- JUN E: family are given below in the table.
- JUN E: Height (in ft.)
- JUN E: 5
- JUN E: 5.2

- JUN E: 5 .4
- JUN E: 5 .6
- JUN E: N umber of Family memb ers
- JUN E: 1
- JUN E: 2
- JUN E: 2
- JUN E: 1
- JUN E: Fi n d th e mean hei ght oft he fami ly memb ers .
- JUN E: (
- JUN E:)
- JUN E: 2.
- JUN E: Wri t et he mod e fo rmu l a fo rg ro up ed dat a and exp lain th et erms in it .
- JUN E: (
- JUN E:)
- JUN E: 3.
- JUN E: Fi nd th e val u eo f
- JUN E: f
- JUN E: i
- JUN E: x
- JUN E: i
- JUN E: fo r th e ab ov ed at a, where
- JUN E: x
- JUN E: i
- JUN E: is th e mid value of each cl ass .

- JUN E: (
- JUN E:)
- JUN E: 4.
- JUN E: T he heig ht of
- JUN E: 12 memb ers are g iv en below in th e tabl e.
- JUN E: H ei gh t(in ft.)
- JUN E: 5
- JUN E: 5 .2
- JUN E: 5 .4
- JUN E: 5 .6
- JUN E: N umber of Family memb ers
- JUN E: 3
- JUN E: 4
- JUN E: 3
- JUN E: 2
- JUN E: Fi n d th e mean h ei gh t o ft h e family memb ers .(
- JUN E:)
- JUN E: 5.
- JUN E: Fi nd a medi an o f
- JUN E: 6
- JUN E: 7
- JUN E: ,
- JUN E: 8
- JUN E: 9

- JUN E: ,
- JUN E: 5
- JUN E: 6
- JUN E: ,
- JUN E: 7
- JUN E: 8
- JUN E: ,
- JUN E: :
- JUN E: 9
- JUN E: .
- JUN E: (
- JUN E:)
- JUN E: 6.
- JUN E: Fi nd
- JUN E: th e medi an of firs t 6 pri menu mb ers .
- JUN E: (
- JUN E:)
- JUN E: 4 MARK
- S: S
- S: 1.
- S: In avil l ag e,an enu merato r has s urv ey ed fo r 25 hou seho lds .The si ze oft he fami ly (nu mb er
- S: o f fami ly memb ers) an d t he nu mb ero f fami li es is tabu l at ed as fol low s:
- S: -
- S: Fi n d th e mod e of th ed at a.(

- S:)
- S: 2.
- S: Daily expenditure of 25
- S: householders is given in the following table:
- S:)
- S: Class Interval
- S: 10
- S: 20
- S: 20
- S: 30
- S: 30
- S: 40
- S: 40
- S: 50
- S: 50
- S: 60
- S: Frequency (
- S: f
- S: i
- S:)
- S: 5
- S: 8
- S: 10
- S: 5

- S: 2

- S: Size of family (No. of

- S: members)

- S: 1

- S: 3

- S: 3

- S: 5

- S: 5

- S: 7

- S: 7

- S: 9

- S: 9

- S: 11

- S: No. of families

- S: 6

- S: 7

- S: 9

- S: 2

- S: 1

- S: Daily expenditure of a family (Rs)

- S: 100

- S: 150

- S: 150

- S: 200

- S: 2 00
- S: 250
- S: 2 50
- S: 300
- S: 3 00
- S: 350
- S: N o .o f hou s eho ld s
- S: 4
- S: 5
- S: 12
- S: 2
- S: 2
- STA TIS T ICS: STA TIS T ICS
- STA TIS T ICS: M arch 201 5 to
- STA TIS T ICS: r t
- STA TIS T ICS: 4
- STA TIS T ICS: t
- JUN E: JUN E
- JUN E: ĩ t r t
- JUN E: 4
- JUN E: 3.
- JUN E: If themed i an of 60 ob s erv ati ons gi ven b elo w i s 28 .5, th en find th e valu es of
- JUN E: x
- JUN E: and

- JUN E: y
- JUN E: . (
- JUN E:)
- JUN E: 4.
- JUN E: T he fol low ing di st ri bu ti on g iv es th e daily profit s (i n
- JUN E: rup ees) earn ed by 50 sho ps in a
- JUN E: l o cali ty .
- JUN E: d is trib uti on an d d raw its Og iv e.
- JUN E: (
- JUN E:)
- JUN E: 5.
- JUN E: Con si der th e fo ll owi ng di st ri but io n o f d aily wages o f 50 w o rk ers of a fact o ry .(
- JUN E:)
- JUN E: D ai ly wag es in Ru pees
- JUN E: 2 00
- JUN E: 2
- JUN E: 50
- JUN E: 2 50
- JUN E: 30
- JUN E: 0
- JUN E: 3 00
- JUN E: 350
- JUN E: 3 50
- JUN E: 40

- JUN E: 0

- JUN E: 4 00

- JUN E: 450

- JUN E: N o .o f wo rk ers

- JUN E: 6

- JUN E: 8

- JUN E: 14

- JUN E: 10

- JUN E: 12

- JUN E: Fi n d th e mean dai ly w ages o f th ew ork ers in th e

- JUN E: facto ry b y using st ep

- JUN E: -

- JUN E: d ev i ati on meth od

- JUN E: 6.

- JUN E: T he fol low ing tabl e gi v es p rodu ctio n y ield p erh ect areo f wh eat o f 100 farms of
avi llag e.

- JUN E: Prod u cti on Y i eld s (Qu in tals /H ect .)

- JUN E: 50

- JUN E: 55

- JUN E: 55

- JUN E: 60

- JUN E: 60

- JUN E: 65

- JUN E: 65

- JUN E: 70

- JUN E: 70

- JUN E: 75

- JUN E: 75

- JUN E: 80

- JUN E: N o .o f farmers

- JUN E: 2

- JUN E: 24

- JUN E: 16

- JUN E: 8

- JUN E: 38

- JUN E: 12

- JUN E: D raw bo th o gi ves fort he abov e dat a.H en ceo bt ai n t he medi an p ro du ct ion yi el
d .(

- JUN E:)

- JUN E: 7.

- JUN E: T he sco res of 20 st uden ts in at est is tabul at ed as fo llo ws . Fin d th e mo d eo ft h
ed at a.(

- JUN E:)

- JUN E: 8.

- JUN E: T he li t eracy rate (in percentag e)o f 35 ci ti es is gi ven i n t he fol low ing tabl e.(

- JUN E:)

- JUN E: L it eracy

- JUN E: r

- JUN E: at e%

- JUN E: 40

- JUN E: 50
- JUN E: 50
- JUN E: 60
- JUN E: 60
- JUN E: 70
- JUN E: 70
- JUN E: 80
- JUN E: 80
- JUN E: 90
- JUN E: N o .o f.cit ies
- JUN E: 3
- JUN E: 11
- JUN E: 10
- JUN E: 8
- JUN E: 3
- JUN E: 9.
- JUN E: T he dai ly w ag es o f80 wo rk ers of a facto ry (
- JUN E:)
- JUN E: D ai ly wag es (Rs .)
- JUN E: 5 00
- JUN E: 600
- JUN E: 6 00
- JUN E: 700
- JUN E: 7 00

- JUN E: 800
- JUN E: 8 00
- JUN E: 900
- JUN E: 9 00
- JUN E: 100 0
- JUN E: N umber of wo rkers
- JUN E: 12
- JUN E: 17
- JUN E: 28
- JUN E: 14
- JUN E: 9
- JUN E: Fi n d th e mean
- JUN E: dai ly w ages o f th ew ork ers oft he fact o ry usin g an ap prop ri ate meth od .
- JUN E: 10.
- JUN E: T h e fol low ing dat agi v es th ei nfo rmatio n o n t he ob served l i fesp an (in hou rs)o f9 0 el ect rical
- JUN E: co mp on ent s .D raw bo th ogi ves fo r th e abou t d at a.(
- JUN E:)
- JUN E: l iv es sp an (in
- JUN E: hou rs)
- JUN E: 0
- JUN E: 20
- JUN E: 20
- JUN E: 40
- JUN E: 40

- JUN E: 60
- JUN E: 60
- JUN E: 80
- JUN E: 80
- JUN E: 1 00
- JUN E: 1 00
- JUN E: 120
- JUN E: Frequ en cy
- JUN E: 8
- JUN E: 12
- JUN E: 15
- JUN E: 23
- JUN E: 18
- JUN E: 14
- JUN E: 11.
- JUN E: D ai ly in co meo f 40 co al
- JUN E: -
- JUN E: min el ab ou rs areg iv en in th e fo llo wing tabl e.
- JUN E: D ai ly Income in Rs.
- JUN E: 1 00
- JUN E: 150
- JUN E: 1 50
- JUN E: 200
- JUN E: 2 00

- JUN E: 25
- JUN E: 0
- JUN E: 2 50
- JUN E: 300
- JUN E: 3 00
- JUN E: 350
- JUN E: 3 50
- JUN E: 40 0
- JUN E: N umber of l ab ou rs
- JUN E: 4
- JUN E: 3
- JUN E: 3
- JUN E: 8
- JUN E: 13
- JUN E: 9
- JUN E: D raw O g iv e Cu rv es (Cumul at iv e frequ en cy) for t his dat a.(
- JUN E:)
- JUN E: 12.
- JUN E: Fi nd th e mis si ng frequ en cies f
- JUN E: 1
- JUN E: and f
- JUN E: 2
- JUN E: i f mean o f 50 obs erv atio ns gi ven b elow is 36 .4 (
- JUN E:)

- JUN E: Cl as s
- JUN E: 0
- JUN E: -
- JUN E: 10
- JUN E: 10
- JUN E: -
- JUN E: 20
- JUN E: 20
- JUN E: -
- JUN E: 30
- JUN E: 30
- JUN E: -
- JUN E: 40
- JUN E: 40
- JUN E: -
- JUN E: 50
- JUN E: 50
- JUN E: -
- JUN E: 60
- JUN E: 60
- JUN E: -
- JUN E: 70
- JUN E: Frequ en cy
- JUN E: 3

- JUN E: 5
- JUN E: f
- JUN E: 1
- JUN E: 10
- JUN E: f
- JUN E: 2
- JUN E: 8
- JUN E: 5
- JUN E: Cl as s In terval
- JUN E: 0
- JUN E: 10
- JUN E: 10
- JUN E: 20
- JUN E: 20
- JUN E: 30
- JUN E: 30
- JUN E: 40
- JUN E: 40
- JUN E: 50
- JUN E: 50
- JUN E: 60
- JUN E: Frequ en cy
- JUN E: 5
- JUN E: x

- JUN E: 20
- JUN E: 15
- JUN E: y
- JUN E: 5
- JUN E: D ai ly Pro fit s (i nRs .)
- JUN E: 0
- JUN E: 50
- JUN E: 50
- JUN E: 100
- JUN E: 1 00
- JUN E: 15 0
- JUN E: 1 50
- JUN E: 20 0
- JUN E: 2 00
- JUN E: 2
- JUN E: 50
- JUN E: 2 50
- JUN E: 30 0
- JUN E: N o .o f sho p
- JUN E: 6
- JUN E: 9
- JUN E: 13
- JUN E: 10
- JUN E: 8

- JUN E: 4
- JUN E: Marks
- JUN E: 10
- JUN E: 20
- JUN E: 20
- JUN E: 30
- JUN E: 30
- JUN E: 40
- JUN E: 40
- JUN E: 50
- JUN E: 50
- JUN E: 60
- JUN E: N o .o f
- JUN E: stu d ent s
- JUN E: 1
- JUN E: 6
- JUN E: 7
- JUN E: 4
- JUN E: 2
- STA TIS T ICS: STA TIS T ICS
- STA TIS T ICS: M arch 201 5 to
- STA TIS T ICS: r t
- STA TIS T ICS: 4
- STA TIS T ICS: t

- JUN E: JUN E
- JUN E: ĩ t r t
- JUN E: 4
- JUN E: 13.
- JUN E: In co mes oft he fami lies in alo cali ty areg iv en .Fin d t he mod eof th ed at a.
- JUN E: (
- JUN E:)
- JUN E: In co mei n Rs .
- JUN E: 1
- JUN E: 20 0
- JUN E: 2 01
- JUN E: 400
- JUN E: 4 01
- JUN E: 60
- JUN E: 0
- JUN E: 6 01
- JUN E: 800
- JUN E: 8 01
- JUN E: 100 0
- JUN E: N umber of famil ies
- JUN E: 7
- JUN E: 10
- JUN E: 16
- JUN E: 12

- JUN E: 3
- JUN E: 14.
- JUN E: H ei gh ts o f th e peopl es of ap art icul ars choo l are gi ven .D raw
- JUN E: g reat ert han co mp ared to come
- JUN E: and fin d t he med i an hei ght from it .(
- JUN E:)
- JUN E: H ei gh t (in cm)
- JUN E: 90
- JUN E: -
- JUN E: 1 00
- JUN E: 1 00
- JUN E: -
- JUN E: 110
- JUN E: 1 10
- JUN E: -
- JUN E: 120
- JUN E: 1 20
- JUN E: -
- JUN E: 130
- JUN E: 1 30
- JUN E: -
- JUN E: 140
- JUN E: 1 40
- JUN E: 15 0

- JUN E: N o .o f Pupi ls

- JUN E: 5

- JUN E: 2

- JUN E: 3

- JUN E: 8

- JUN E: 8

- JUN E: 6

- JUN E: 15.

- JUN E: T he fol low ing tabl e sh ows th e ag es o ft h ep ati ent s ad mi tt ed in a

- JUN E: h os pit al du ring ay ear.

- JUN E: A ge in years

- JUN E: 10

- JUN E: 20

- JUN E: 20

- JUN E: 30

- JUN E: 30

- JUN E: 40

- JUN E: 40

- JUN E: 50

- JUN E: 50

- JUN E: 60

- JUN E: 60

- JUN E: 70

- JUN E: N o .o f Pat i ent s

- JUN E: 8
- JUN E: 15
- JUN E: 25
- JUN E: 27
- JUN E: 18
- JUN E: 7
- JUN E: Draw a
- JUN E: more
- JUN E: the original curve for the abut data.
- JUN E: (
- JUN E:)
- JUN E: 16.
- JUN E: The below
- JUN E: the distribution gives the weight of 40 students in a class. Find the median weight of
- JUN E: the students .
- JUN E: (
- JUN E:)
- JUN E: Weight in
- JUN E: kg
- JUN E: 30
- JUN E: 35
- JUN E: 35
- JUN E: 40
- JUN E: 40

- JUN E: 45
- JUN E: 45
- JUN E: 50
- JUN E: 50
- JUN E: 55
- JUN E: 55
- JUN E: 60
- JUN E: N o .o f stu d ent s
- JUN E: 4
- JUN E: 5
- JUN E: 10
- JUN E: 8
- JUN E: 8
- JUN E: 5
- JUN E: 17.
- JUN E: D raw less th an Og iv e for th e fo llo win g freq uen cy
- JUN E: d is t rib uti on .Fi nd th e medi an fro m
- JUN E: o bt ai ned cu rv e.(
- JUN E:)
- IQ: IQ
- IQ: 60
- IQ: 70
- IQ: 70
- IQ: 80

- IQ: 80
- IQ: 90
- IQ: 90
- IQ: 1 00
- IQ: 1 00
- IQ: 110
- IQ: 1 10
- IQ: 120
- IQ: 1 20
- IQ: 130
- IQ: N o .o f stu d ent s
- IQ: 2
- IQ: 5
- IQ: 12
- IQ: 31
- IQ: 39
- IQ: 10
- IQ: 4
- IQ: 18.
- IQ: Fi nd th e mean ag eo f1 00 res id en ts o f a colo ny fro m th e fol low in g d at a.(
- IQ:)
- IQ: A ge (in yrs)
- IQ: 0
- IQ: 10

- IQ: 10

- IQ: 20

- IQ: 20

- IQ: 30

- IQ: 30

- IQ: 40

- IQ: 40

- IQ: 50

- IQ: 50

- IQ: 60

- IQ: 60

- IQ: 70

- IQ: No. of person s

- IQ: 10

- IQ: 15

- IQ: 25

- IQ: 25

- IQ: 10

- IQ: 10

- IQ: 5

- IQ: 19.

- IQ: If the mean of the following frequency distribution is 50, then find the value of

- IQ: k

- IQ: .

- IQ: (
- IQ:)
- IQ: Cl as s
- IQ: 0
- IQ: 20
- IQ: 20
- IQ: -
- IQ: 40
- IQ: 40
- IQ: -
- IQ: 60
- IQ: 60
- IQ: -
- IQ: 80
- IQ: 80
- IQ: -
- IQ: 1 00
- IQ: Frequ en cy
- IQ: 17
- IQ: 20
- IQ: 32
- IQ: k
- IQ: 19
- IQ: 20.

- IQ: The following table gives the marks obtained by 100 students in SA

- IQ: Exams in

- IQ: Mathematics subject. Draw

- IQ: ogive graph of less than and greater than.

- IQ: (

- IQ:)

- IQ: 21.

- IQ: Find the median for the following data.

- IQ: (

- IQ: May 2022

- IQ:)

- IQ: Class interval

- IQ: 0

- IQ: -

- IQ: 10

- IQ: 10

- IQ: 20

- IQ: 20

- IQ: -

- IQ: 30

- IQ: 30

- IQ: -

- IQ: 40

- IQ: 40

- IQ: -
- IQ: 50
- IQ: Frequ en cy
- IQ: 6
- IQ: 10
- IQ: 12
- IQ: 8
- IQ: 8
- IQ: 22.
- IQ: Fi nd th e mod e of th e fo llo win g d at a
- IQ: (
- IQ: A ug22
- IQ:)
- IQ: Marks
- IQ: 50
- IQ: 55
- IQ: 55
- IQ: -
- IQ: 60
- IQ: 60
- IQ: -
- IQ: 65
- IQ: 65
- IQ: -

- IQ: 70
- IQ: 70
- IQ: -
- IQ: 75
- IQ: 75
- IQ: -
- IQ: 80
- IQ: N o .o f stu d ent s
- IQ: 2
- IQ: 8
- IQ: 12
- IQ: 24
- IQ: 38
- IQ: 16
- C: C
- C: l a s s i n t e r v a l
- C: 0
- C: -
- C: 10
- C: 10
- C: -
- C: 20
- C: 20
- C: -

- C: 30
- C: 30
- C: -
- C: 40
- C: 40
- C: -
- C: 50
- C: 50
- C: -
- C: 60
- F: F
- F: requ en cy
- F: 3
- F: 16
- F: 26
- F: 31
- F: 16
- F: 8
- STA TIS T ICS: STA TIS T ICS
- STA TIS T ICS: M arch 201 5 to
- STA TIS T ICS: r t
- STA TIS T ICS: 4
- STA TIS T ICS: t
- JUN E: JUN E

- JUN E: i t r t
- JUN E: 4
- JUN E: 23.
- JUN E: Fi nd th e mod e fo r th e followi ng d ata.(
- JUN E:)
- JUN E: Cl as s
- JUN E: i nt erv al
- JUN E: 1000
- JUN E: -
- JUN E: 1500
- JUN E: 1500
- JUN E: -
- JUN E: 2000
- JUN E: 2000
- JUN E: -
- JUN E: 2500
- JUN E: 2500
- JUN E: -
- JUN E: 3000
- JUN E: 3000
- JUN E: -
- JUN E: 3500
- JUN E: 3500
- JUN E: -

- JUN E: 4000
- JUN E: 4000
- JUN E: -
- JUN E: 4500
- JUN E: 4500
- JUN E: -
- JUN E: 5000
- JUN E: Frequ en cy
- JUN E: 24
- JUN E: 40
- JUN E: 33
- JUN E: 28
- JUN E: 30
- JUN E: 22
- JUN E: 16
- JUN E: 7
- JUN E: 24.
- F: F
- F: i nd th e mod e fo r th e followi ng d ata.(
- J: J
- J:)
- J: 25.
- J: Fi nd th eA ri th met icmean o f th e fo llo wing dat a.
- J: 26.

- J: Find the mode of the following data.

- J: 1.

- J: (

- J:)

- A.: A.

- A.: More than cumulative frequency, lower limits

- B.: B.

- B.: More than cumulative frequency, upper limits

- C.: C.

- C.: Less than cumulative frequency, lower limits

- D.: D.

- D.: Less than cumulative frequency, upper limits

- D.: 2.

- D.: Observe the following tables

- D.: 1)

- D.: Class interval

- D.: Frequency (

- D.: f

- D.:)

- D.: Class mark (

- D.: x

- D.:)

- D.: fx

- D.: 2)

- D.: Class interval
- D.: Frequency (
- D.: f
- D.:)
- D.: Lower limit (
- D.: x
- D.:)
- D.: fx
- D.: For finding arithmetic mean by direct method, the suggested frequency distribution table
- D.: (
- D.:)
- A.: A.
- A.: only (1) is true
- B.: B.
- B.: only (2) is true
- C.: C.
- C.: (1) and (2) are true
- D.: D.
- D.: None of the above
- D.: 3.
- D.: Median =
- D.: l +
- H: H
- H: @

- Û: Û

- Û: .

- Û: ?

- Ö Û: Ö Û

- A: A

- Û: Û

- I: I

- I: x h, wh ere

- I: cf

- I: =

- I: (

- I:)

- A.: A.

- A.: Cu mu lati ve freq u en cy oft he class preced in g t he med i an cl ass

- B.: B.

- B.: Cu mu lati ve freq u en cy oft he med i an cl ass

- C.: C.

- C.: Cu mu lati ve freq u en cy oft he class su cceedi ng th e medi an class

- D.: D.

- D.: Su mo f th e frequ encies

- D.: Cl as s In terval

- D.: 0

- D.: 10

- D.: 10

- D.: 20
- D.: 20
- D.: 30
- D.: 30
- D.: 40
- D.: 40
- D.: 50
- D.: 50
- D.: 60
- D.: 60
- D.: 70
- D.: 70
- D.: 80
- D.: Frequ en cy
- D.: 7
- D.: 14
- D.: 13
- D.: 12
- D.: 20
- D.: 11
- D.: 15
- D.: 8
- D.: Cl as s In terval
- D.: 0

- D.: 10
- D.: 10
- D.: 20
- D.: 20
- D.: 30
- D.: 30
- D.: 40
- D.: 40
- D.: 50
- D.: 50
- D.: 60
- D.: 60
- D.: 70
- D.: Frequ en cy
- D.: 11
- D.: 14
- D.: 15
- D.: 20
- D.: 15
- D.: 13
- D.: 12
- D.: Cl as s In terval
- D.: 0
- D.: 10

- D.: 10
- D.: 20
- D.: 20
- D.: 30
- D.: 30
- D.: 40
- D.: 40
- D.: 50
- D.: 50
- D.: 60
- D.: Frequ en cy
- D.: 5
- D.: 8
- D.: 20
- D.: 12
- D.: 7
- D.: 5
- STA TIS T ICS: STA TIS T ICS
- STA TIS T ICS: M arch 201 5 to
- STA TIS T ICS: r t
- STA TIS T ICS: 4
- STA TIS T ICS: t
- JUN E: JUN E
- JUN E: ĩ t r t

- JUN E: 4

- JUN E: 4.

- JUN E: O bs erv et he fol low ing graph s .

- JUN E: w

- JUN E: hi ch of the abo v egi v en fi gu res

- JUN E: O giv e cu rve?

- JUN E: (

- JUN E:)

- A.: A.

- A.: O nly (1)i s t ru e

- B.: B.

- B.: O nly (2)i s t ru e

- C.: C.

- C.: Bo th (1) an d (2) aretru e

- D.: D.

- D.: N on eo f th es e

- D.: 5.

- L: L

- L: et

- L: x

- L: 1

- L: ,

- L: x

- L: 2

- L: x
- L: n
- L: be the n observations and
- T: T
- T: \mathbb{S}
- T: be the mean of observations, then
- T: (
- T:)
- A.: A.
- A.: 0
- B.: B.
- T: T
- J: J
- J: \mathbb{S}
- C.: C.
- C.: n
- T: T
- T: \mathbb{S}
- D.: D.
- D.: 2
- T: T
- J: J
- J: \mathbb{S}
- J: 6.

- J: 3 ,2 ,4 ,3 ,5 ,2 ,
- J: x
- J: ,6 .If the mode of this data is 3 then
- J: x
- J: =
- J: (
- J:)
- A.: A.
- A.: 4
- B.: B.
- B.: 3
- C.: C.
- C.: 2
- D.: D.
- D.: 5
- D.: 7.
- D.: Mode of the grouped data can be calculated by using the formula,
- D.: (
- D.:)
- D.: Mode =
- D.: l
- D.: +
- B: B
- U: U

- Ù: -

- Ù: ?

- Ù: Ù

- Ù: ,

- Ù: 6

- Ù: Ù

- Ù: -

- Ù: ?

- Ù: Ù

- Ù: ,

- Ù: ?

- Ù: Ù

- Ù: .

- C: C

- C: x

- C: h

- C: ,

- C: f

- C: 1

- C: rep res en ts

- A.: A.

- A.: Frequ en cy oft h emod al cl as s

- B.: B.

- B.: Frequ en cy oft h ecl ass preced in g th e mod al class

- C.: C.

- C.: Frequency of the class succeeding the modal class

- D.: D.

- D.: Cumulative frequency of the class preceding the modal class

- D.: 8.

- D.: The X

- D.: (

- D.:)

- A.: A.

- A.: Median of the data

- B.: B.

- B.: Mode of the data

- C.: C.

- C.: Mean of the data

- D.: D.

- D.: Average of mid values of the data

- D.: 9.

- D.: For the terms

- D.: x

- D.: + 1,

- D.: x

- D.: + 2,

- D.: x

- D.: 1 ,

- D.: x

- D.: +3 and

- D.: x

- D.: 2

- D.: (

- D.: x

- D.: D

- D.: N), the median of the data is 12 then

- D.: x

- D.: =

- D.: (

- D.:)

- A.: A.

- A.: 9

- B.: B.

- B.: 10

- C.: C.

- C.: 11

- D.: D.

- D.: 13

- D.: 10.

- D.: Which one of the following is NOT a measure of Central tendency

- D.: (

- D.:)

- A.: A.

- A.: Mean

- B.: B.

- B.: Medi an

- C.: C.

- C.: Rang e

- D.: D.

- D.: Mod e

- D.: 11.

- D.: T he most st abl e measu reo f Cen t ral tend ency is (

- D.:)

- A.: A.

- A.: Mean

- B.: B.

- B.: Medi an

- C.: C.

- C.: Mod e

- D.: D.

- D.: D ev i ati on

- D.: 12.

- D.: 1 4 i s d el eted fro mt he data12 ,14 ,15 ,16 17 ,18 ,19 and 20 ,th en th e medi an in creas es by

- A.: A.

- A.: 1

- B.: B.

- B.: 1 .5

- C.: C.

- C.: 2

- D.: D.

- D.: 0 .5

- D.: 13.

- D.: The mean of the first 8 multiples of 3 is (

- D.:)

- A.: A.

- A.: 8

- B.: B.

- B.: 13 .5

- C.: C.

- C.: 13

- D.: D.

- D.: 27

- D.: 14.

- D.: If the lines $2x + 3y = 42$ and $3x + 2y = 18$ intersect each other at $(42, 18)$, then

- D.: the median of the given data is(

- D.:)

- A.: A.

- A.: 60

- B.: B.

- B.: 42

- C.: C.
- C.: 18
- D.: D.
- D.: 26
- D.: 15.
- D.: Mean of certain number of observations is
- T: T
- T: §
- T: .If each observation is divided by
- T: m
- T: (
- T: m
- T: n
- T: ,then the mean of new observations is (
- T:)
- A.: A.
- A.: \bar{x}
- A.: §
- A.: \bar{a}
- E: E
- I: I
- B.: B.
- T: T
- T: §

- E: E

- E:

- E:

- C.: C.

- T: T

- T: §

- E: E

- E:

- E:

- D.: D.

- D.: ë

- D.: §

- D.: à

- E: E

- J: J

- J: 16.

- J: If the mean of

- J: a

- J: ,

- J: a

- J: +3 ,

- J: a

- J: +6 ,

- J: a

- J: + 9 and
- J: a
- J: + 12 is 10 ,t hen t he val ue of '
- J: a
- J: ' is .
- J: (
- A: A
- A: 2
- A: 3
- A:)
- A.: A.
- A.: 1
- B.: B.
- B.: 2
- C.: C.
- C.: 3
- D.: D.
- D.: 4
- D.: Lower lim it s
- D.: More than cf
- D.: Figure (1)
- D.: Upp
- D.: er lim it s
- D.: L ess

- D.: than
- D.: cf
- D.: Figure (2)
- D.: (
- D.:)
- STA TIS T ICS: STA TIS T ICS
- STA TIS T ICS: M arch 201 5 to
- STA TIS T ICS: r t
- STA TIS T ICS: 4
- STA TIS T ICS: t
- JUN E: JUN E
- JUN E: i t r t
- JUN E: 4
- JUN E: 17.
- JUN E: Fro m t h egi v en O giv e cu rv e,th e v alu eo f th e med ian o f th e d at a is
- JUN E: (
- JUN E: Ma y 2022
- JUN E:)
- A.: A.
- A.: 20
- B.: B.
- B.: 25
- C.: C.
- C.: 15

- D.: D.
- D.: 30
- D.: 18.
- D.: Fro mt h egi v en o gi ve curv e th ev alu eo f the
- D.: medi an oft he dat a is
- D.: (
- D.: A ug2 2
- D.:)
- A.: A.
- A.: 20
- B.: B.
- B.: 25
- C.: C.
- C.: 15
- D.: D.
- D.: 30
- D.: 19.
- T: T
- T: he mod eo f th e
- T: v alues ofs in 90° , co
- T: s
- T: 90° , $\tan 60^\circ$, $\sec 60^\circ$, co sec 90° is (
- T:)
- A.: A.

- A.: 0
- B.: B.
- B.: 2
- C.: C.
- C.: 1
- D.: D.
- D.: $\frac{3}{4}$
- D.: u
- D.: 20.
- D.: The mean of first five primes is _ _ _ _
- A.: A.
- A.: 5 .6
- B.: B.
- B.: 8 .1
- C.: C.
- C.: 7 .3
- D.: D.
- D.: 5
- D.: * * * * *
- D.: Ra mes h
- D.: B an dar i
- D.: ZP HS Nek ko nda
- D.: W ara n ga l
- D.: Upp er

- D.: b o u n d a r y
- D.: L e s s
- D.: t h a n
- D.: c f
- D.: 10
- D.: 20
- D.: 30
- D.: 40
- D.: 50
- D.: 5
- D.: 10
- D.: 15
- D.: 20
- D.: 25
- D.: 30
- S T A T I S T I C S: S T A T I S T I C S

4 MARKS

- H K C: 1.
- H K C: P r o v e t h a t $3 +$
- H K C: 2
- H K C: $\frac{3}{4}$
- H K C: w
- H K C: i r r a t i o n a l n u m b e r. (
- H K C:)

- H K C: 2.
- H K C: E xp and
- H K C: lo g
- H K C: @
- H K C: 5 5 6 9
- H K C: 7 6
- A: A
- A: (
- A:)
- A: 3.
- A: E xp ress th e nu mb ers 6 825 and 3 82 5 as apro du ct of it s p rime fact ors .
- A: Fi n d th eH CF and LCM of th e ab ov enu mb ers by us ing th ei r produ cts o f pri me fact ors .
- A: J us ti fy you r answ er. (
- A:)
- A: 4.
- A: U se Eu cl id 's d ivi sio n L emma to sh ow t hat th e cu b eo f an y
- A: po si tiv e int eger is oft he form 7
- A: m
- A: or
- A: 7
- A: m
- A: +1 or7
- A: m
- A: +6 . (

- A:)
- A: 5.
- A: Prove that
- A: $\frac{3}{4}$
- A: t
- F: F
- F: u
- F: $\frac{3}{4}$
- F: w
- F: is an irrational number. (
- F:)
- F: 6.
- F: Use Euclid's division lemma, show that the cube of any positive integer is of the form $3m^3$
- F: p
- F: or
- F: 3
- F: p
- F: +1 or 3
- F: p
- F: + 2 for any
- F: p
- F:)
- F: 7.
- F: Prove that

- F: $\frac{3}{4}$

- F: u

- F: $\frac{3}{4}$

- F: w

- F: is an irrational number. (

- F:)

- F: 8.

- F: n

- F: or 5

- F: n

- F: +1 or

- F: 5

- F: n

- F: +4 where

- F: n

- F: is a whole number. (

- F:) &(

- F:)

- F: 9.

- F: If

- F: x

- F: 2

- F: +

- F: y

- F: 2
- F: $\equiv 27$
- F: xy
- F: ,
- F: then show that
- HKC: HKC
- HKC: @
- HKC: \ddot{e}
- HKC: ?
- HKC: \dot{i}
- HKC: 9
- A: A
- L: L
- L: 5
- L: 6
- L: >
- HKCT: HKCT
- E: E
- HKCU: HKCU
- HKCU: ?
- HKCU: (
- HKCU:)
- HKCU: 10.
- HKCU: Show that cube of any positive integer will be in the form of

- HKCU: 8
- HKCU: m
- HKCU: or 8
- HKCU: m
- HKCU: +1 or 8
- HKCU: m
- HKCU: + 3 or
- HKCU: 8
- HKCU: m
- HKCU: +5 or 8
- HKCU: m
- HKCU: +7 ,wh ere
- HKCU: m
- HKCU: is awho le numb er. (
- HKCU:)
- HKCU: 11.
- HKCU: Prov e th at
- HKCU: $\frac{3}{4}$
- HKCU: u
- HKCU: +
- HKCU: $\frac{3}{4}$
- HKCU: w
- HKCU: i s an irrat ion al nu mb er. (
- HKCU:)

- H K C U: 12.
- H K C U: Prov e th at
- H K C U: $\frac{3}{4}$
- H K C U: t
- E: E
- E: $\frac{3}{4}$
- E: s s
- E: is ani rrat io nal n umb er. (
- E:)
- E: 13.
- E: Prov e th at
- E: $\frac{3}{4}$
- E: t
- E: +
- E: $\frac{3}{4}$
- E: y
- E: i s an irrati on al nu mb er. (
- E:)
- E: 14.
- E: Sh ow t h at
- E: $\frac{3}{4}$
- E: w
- F: F
- F: $\frac{3}{4}$

- F: u
- F: is an irrational number.
- F: (
- F:)
- F: 15.
- F: Prove that
- F: $\frac{3}{4}$
- F: w
- E: E
- E: $\frac{3}{4}$
- E: y
- E: is an irrational number.
- E: (
- E: May 20 22
- E:)
- E: 16.
- E: Prove that
- E: $\frac{3}{4}$
- E: u
- E: E
- E: $\frac{3}{4}$
- E: y
- E: is an irrational number.
- E: (

- E: A ug
- E: 20 22
- E:)
- E: 17.
- E: Prov e th at 2
- E: $\frac{3}{4}$
- E: u
- E: +
- E: $\frac{3}{4}$
- E: w
- E: i s ani rrat ion al nu mber.
- E: 18.
- E: Prov e th at
- E: 3
- E: $\frac{3}{4}$
- P: P
- P: +
- P: $\frac{3}{4}$
- P: à
- P: i s an irrati on al nu mb er.
- P: 19.
- P: If
- P: x
- P: 2

- \mathbb{P} : +

- \mathbb{P} : y

- \mathbb{P} : 2

- \mathbb{P} : =34

- \mathbb{P} : xy

- \mathbb{P} : then proved that 2

- \mathbb{P} : log

- \mathbb{P} : (

- \mathbb{P} : x

- \mathbb{P} : +

- \mathbb{P} : y

- \mathbb{P} :)=2

- \mathbb{P} : log

- \mathbb{P} : 6 +

- \mathbb{P} : log

- \mathbb{P} : x

- \mathbb{P} : +

- \mathbb{P} : log

- \mathbb{P} : y

- \mathbb{P} : .

- REAL NUMBERS: REAL NUMBERS

- REAL NUMBERS: March 2015 to

- REAL NUMBERS: June 202

- REAL NUMBERS: 4

- REAL NUMBERS: t
- REAL NUMBERS: 4
- REAL NUMBERS: Part
- REAL NUMBERS: -
- REAL NUMBERS: b
- REAL NUMBERS: 1.
- REAL NUMBERS: The number of prime factors of 36 is (
- REAL NUMBERS:)
- A.: A.
- A.: 4
- B.: B.
- B.: 3
- C.: C.
- C.: 2
- D.: D.
- D.: 1
- D.: 2.
- D.: The
- D.: exponential form of
- D.: log
- D.: 10
- D.: $0.001 =$
- D.: 3 is
- D.:

- D.: (
- D.:)
- A.: A.
- A.: (0 .001)
- A.: 10
- A.: =
- A.: 3
- B.: B.
- B.: (
- B.: 3)
- B.: 10
- B.: = 0 .00 1
- C.: C.
- C.: (1 0)
- C.: 3
- C.: =
- C.: 0 .001
- D.: D.
- D.: (1 0)
- D.: 3
- D.: = 0 .00 1
- D.: 3.
- D.: Wh i ch of th e fo ll owin g i s t ru e for ani rrat io nal n umb er? (
- D.:)

- D.: (i).
- D.: Wh i ch can be writ t en in th e fo rmo f
- D.: \tilde{a}
- D.: \tilde{a}
- D.: ,w h ere p, q
- D: \mathbb{D}
- D: (i i).
- D: Wh i ch cann ot be wri tt en in th e form of
- D: \tilde{a}
- D: \tilde{a}
- D: ,w here p ,q
- D: \mathbb{D}
- D: (i ii).
- D: N on
- D: -
- D: t ermin atin g rep eat ing deci mals .
- D: (i v).
- D: N on termi nati ng ,non
- D: -
- D: rep eati ng d eci mal s .
- A.: A.
- A.: O nly (i)
- B.: B.
- B.: O nly (ii i)

- C.: C.

- C.: (i),(ii)

- D.: D.

- D.: (i),(iv)

- D.: 4.

- D.: Which one of the following is not rational number?

- D.: (

- D.:)

- A.: A.

- A.: 54

- A.: 5 =

- B.: B.

- B.: log

- B.: 10

- B.: 3

- C.: C.

- C.: w

- C.: ä

- C.: tu

- C.: \$

- C.: \$

- C.: \$

- C.: \$

- D.: D.

- D.: 1 23 .123
- D.: 5.
- D.: L C M o f 24 ,36 is (
- D.:)
- A.: A.
- A.: 24
- B.: B.
- B.: 36
- C.: C.
- C.: 72
- D.: D.
- D.: 8 64
- D.: 6.
- D.: T h e
- D.: lo garith mic form of
- D.: a
- D.: b
- D.: =
- D.: c
- D.: i s (
- D.:)
- A.: A.
- A.: l o g
- A.: a

- A.: c
- A.: =
- A.: b
- B.: B.
- B.: log
- B.: b
- B.: c
- B.: =
- B.: a
- C.: C.
- C.: log
- C.: a
- C.: b
- C.: =
- C.: c
- D.: D.
- D.: log
- D.: b
- D.: a
- D.: =
- D.: c
- D.: 7.
- D.: If $3\log ($
- D.: x

- D.: $+3) = \log 27$, then the value of

- D.: x

- D.: is

- D.: (

- D.:)

- A.: A.

- A.: 0

- B.: B.

- B.: 1

- C.: C.

- C.: 6

- D.: D.

- D.: 24

- D.: 8.

- D.: Which one of the following rational numbers has terminating decimal

- D.: expression ? (

- D.:)

- A.: A.

- A.: 5 5

- A.: ; 4 4 4

- B.: B.

- B.: = 5

- B.: 6 5 4 4 4

- C.: C.

- C.: 7 8 7

- C.: 6

- C.: /

- H: H

- H: 9

- H: /

- H: H

- H: ;

- H: /

- D.: D.

- D.: 6 5

- D.: = 4 4 4

- D.: 9.

- D.: If P

- D.: 1

- D.: and P

- D.: 2

- D.: are two odd prime numbers such that P

- D.: 1

- > P: > P

- > P: 2

- > P: , then P

- > P: 1

- > P: 2

- P: P
- P: 2
- P: 2
- P: is ... (
- P:)
- A.: A.
- A.: A n ev en nu mb er
- B.: B.
- B.: A n od d n umb er
- C.: C.
- C.: A pri menu mber
- D.: D.
- D.: A n od d p rime nu mb er
- D.: 10.
- D.: I n th er ation al for mo f a termin ating d ecimal
- D.: n umb er p rime facto r o f th ed eno min ator is
- D.: _
- D.: (
- D.:)
- A.: A.
- A.: o nly 2
- B.: B.
- B.: o nly 5
- C.: C.

- C.: 2 or 5 only
- D.: D.
- D.: any Prime
- D.: 11.
- D.: log
- D.: 10
- D.: 2 +
- D.: log
- D.: 10
- D.: 5 value = (
- D.:)
- A.: A.
- A.: 1
- B.: B.
- B.: 2
- C.: C.
- C.: 5
- D.: D.
- D.: 10
- D.: 12.
- D.: If
- D.: log
- D.: 3
- D.: 729 =

- D.: x

- D.: ,th en th e valu eo f

- D.: x

- D.: is (

- D.:)

- A.: A.

- A.: 9

- B.: B.

- B.: 2 43

- C.: C.

- C.: 81

- D.: D.

- D.: 6

- D.: 13.

- D.: T he nu mb ero f di git s i n t he fract ion al p art o f th ed eci mal form of

- D.: à

- Ý: Ý

- Ù: Ù

- Ù: i s (

- Ù:)

- A.: A.

- A.: 1

- B.: B.

- B.: 2

- C.: C.
- C.: 3
- D.: D.
- D.: 4
- D.: 14.
- D.: The decimal expansion of 0.225 in its rational form is (
- D.:)
- A.: A.
- A.: 2 25
- B.: B.
- B.: 6 6 9
- B.: 5 4
- B.: .
- C.: C.
- C.: 6 6 9
- C.: 5 4
- C.: 0
- D.: D.
- D.: =
- D.: 8 4
- REAL: REAL
- NUMBERS: NUMBERS
- NUMBERS: March 2015 to
- NUMBERS: r t

- NUM B ERS: 4
- NUM B ERS: t
- NUM B ERS: 4
- NUM B ERS: 15.
- NUM B ERS: E very ev en pos it iv ein t eg ercan b ew ritt en i n t he form of
- NUM B ERS: (
- NUM B ERS: p
- D: D
- Z: Z
- Z: +
- Z:)
- Z: (
- Z:)
- A.: A.
- A.: 2
- A.: p
- A.: +1
- B.: B.
- B.: 2
- B.: p
- C.: C.
- C.: 2
- C.: p
- C.: 1

- D.: D.

- D.: 3

- D.: p

- D.: 16.

- D.: The exponential form of

- \hat{O} : \hat{O}

- \hat{O} : $\frac{3}{4}$

- T: T

- T: 8

- T: = y

- T: is ...

- T:

- T: (

- T:)

- A.: A.

- A.: a

- A.: y

- A.: =

- A.: x

- A.: 4

- B.: B.

- B.: y

- B.: a

- B.: = 4

- C.: C.

- C.: a

- C.: y

- C.: =

- C.: x

- C.: 2

- D.: D.

- D.: x

- D.: y

- D.: =

- D.: a

- D.: 2

- D.: 17.

- D.: T he

- D.: l as t (

- D.: un it pl ace)d ig it o f 6

- D.: 2019

- D.: i n i ts st an dard fo rmi s(

- D.:)

- A.: A.

- A.: 6

- B.: B.

- B.: 4

- C.: C.

- C.: 9
- D.: D.
- D.: 19
- D.: 18.
- D.: If
- H K C: H K C
- H K C: 5 4
- H K C: t
- H K C: = 0.3 010
- H K C: ,
- H K C: th en
- H K C: log
- H K C: 10
- H K C: 32
- H K C: i
- H K C: s . . .
- H K C: (
- H K C:)
- A.: A.
- A.: 5 .30 10
- B.: B.
- B.: 2 .30 10
- C.: C.
- C.: 1 .50 50

- D.: D.

- D.: 0.30 10

- D.: 19.

- D.: The product of prime factors of 108 is

- D.: (

- D.: May 20 22

- D.:)

- A.: A.

- A.: 2

- A.: 3

- A.: $\times 3$

- A.: 2

- B.: B.

- B.: 2

- B.: 2

- B.: $\times 3$

- B.: 2

- C.: C.

- C.: 2

- C.: 2

- C.: $\times 3$

- C.: 3

- D.: D.

- D.: 2

- D.: 3
- D.: x^3
- D.: 3
- D.: 20.
- D.: The decimal form of
- Ü: Ü
- Ý: Ý
- Ý: is
- Ý: (
- A: A
- A: ug
- A: 2
- A:)
- A.: A.
- A.: 0.75
- B.: B.
- B.: 0.50
- C.: C.
- C.: 0.25
- D.: D.
- D.: 0.075
- D.: 21.
- D.: Prime factorization of 98 is
- D.: (

- D.:)

- A.: A.

- A.: 2

- A.: 2

- A.: $\times 7$

- B.: B.

- B.: 2

- B.: 2

- B.: $\times 7$

- B.: 2

- C.: C.

- C.: 2 $\times 7$

- C.: 2

- D.: D.

- D.: 2

- D.: 3

- D.: $\times 7$

- D.: 22.

- D.: The LCM of the given numbers

- D.: x

- D.: and

- D.: y

- D.: where

- D.: y

- D.: is a multiple of

- D.: x

- D.: is

- D.: (

- D.:)

- A.: A.

- A.: x

- B.: B.

- B.: y

- C.: C.

- C.: xy

- D.: D.

- D.: x

- D.: +

- D.: y

- D.: 23.

- D.: If

- D.: $125 = 7$

- D.: q

- D.: +

- D.: r

- D.: , where

- D.: q

- D.: and

- D.: r

- D.: are quotient and remainder respectively, then the value of

- D.: r

- D.: is

- A.: A.

- A.: 0

- B.: B.

- B.: 1

- C.: C.

- C.: 3

- D.: D.

- D.: 6

- D.: 24.

- D.: 20

- D.: $\times 5$

- D.: 2

- D.: is _ _ _

- A.: A.

- A.: 0

- B.: B.

- B.: 6

- C.: C.

- C.: 4

- D.: D.

- D.: 5
- D.: 25.
- D.: The HCF of 12 and 21 is ____
- A.: A.
- A.: 4
- B.: B.
- B.: 7
- C.: C.
- C.: 3
- D.: D.
- D.: 6
- SETS: SETS
- (B): 1.
- X: X
- X: is a set of factors of 24 and Y is a set of
- X: factors of 36, then find sets X
- X: \emptyset
- Y: Y
- Y: and X
- Y: \emptyset
- Y: Y
- Y: by
- Y: using Venn
- Y: diagram and comment on the answer. (

- Y:)
- SE TS: SE TS
- SE TS: x
- SE TS: y
- SE TS: z
- SE TS: a
- A: A
- B: B
- B: b
- B: d
- B: m
- B: e
- B: u
- B: p
- B: q
- B: r
- B: t
- B: μ
- X: X
- Y: Y
- C: C
- I: I
- L: L
- L:

- P: P

- E: E

- N: N

- A: A

- U: U

- T: T

- T: March 2015 to

- T: r t

- T: 4

- T: t

- J: J

- UN E: UN E

- UN E: ĩ t r t

- UN E: 4

- UN E: 2.

- UN E: A = {x: x

- Đ: Đ

- N: N

- N: and x is a multiple of 4}; B = {x : x

- Đ: Đ

- N: N

- N: and x is a multiple of 6

- N: C = {x : x

- Đ: Đ

- N: N
- N: and x is a multiple LCM of 4 and 6}. Find A
- N: \hat{e}
- N: B. How can you relate h e
- N: sets A
- N: \hat{e}
- N: B and C. (
- N:)
- N: 3.
- N: From the following Venn diagram,
- N: write the elements of sets A and B. And verify
- N: $n(A$
- N: \hat{e}
- N: $B) + n(A$
- N: \hat{e}
- N: $B) = n(A) + n(B)$. (
- N:)
- N: 4.
- N: Using the Venn diagram, verify
- N: $n(A$
- N: \hat{e}
- N: $B) = n(A) + n(B)$
- N: $n(A$
- N: \hat{e}

- B). (: B). (

- B). (:)

- B). (: 5.

- A = { : A = {

- A = { : x

- A = { : :

- A = { : x

- A = { : is a perfect square,

- A = { : x

- A = { : < 50 ,

- A = { : x

- D : D

- N } , : N } ,

- B = { : B = {

- B = { : x

- B = { : :

- B = { : x

- B = { : = 8

- B = { : m

- B = { : + 1 ,

- B = { : where m

- D : D

- W , : W ,

- W , : x

- W,: <5 0 ,
- W,: x
- D: D
- D: N }. Fin d A
- D: ê
- B: B
- B: an d d isp l ay i t w ith Ven n
- B: d i ag ram. (
- B:)
- B: 6.
- B: If A = {
- B: x
- B: :
- B: x
- B: i s ap ri me and
- B: x
- B: <
- 10 },B= { : 10 },B= {
- 10 },B= { : x
- 10 },B= { : :
- 10 },B= { : x
- 10 },B= { : is a fact or of 6 },
- 10 },B= { : t h en fi nd A
- 10 },B= { : ê

- B,A: B,A

- B,A: \ddot{e}

- B,A: B and

- A: A

- B. (: B. (

- B. (:)

- B. (: 7.

- B. (: If A = {

- B. (: x

- B. (: : 2

- B. (: x

- B. (: +1 ,

- B. (: x

- \mathbb{D} : \mathbb{D}

- N ,: N ,

- N ,: x

- N ,: x

- N ,: :

- N ,: x

- N ,: i s a c o m p o s i t e n u m b e r ,

- N ,: x

- N ,: t h a t (A

- N ,:

- B): B)

- (A: (A

- (A:

- B)= (A: B)= (A

- B): B)

- B):

- (B: (B

- A). (: A). (

- A). (:)

- A). (: 8.

- A). (: If A = {

- A). (: x

- A). (: :

- A). (: x

- A). (: is a prime less than 20 } and B = {

- A). (: x

- A). (: :

- A). (: x

- A). (: is a whole number less than 10 } then

- A). (: verify

- A). (: n

- (A: (A

- (A: \vec{e}

- B) =: B) =

- B) =: n

- (A) +: (A) +
- (A) +: n
- (B): (B)
- (B): n
- (A: (A
- (A: ê
- B): B).
- B): (
- B):)
- B): 9.
- B): Fro mt h egi v en V en n di ag ram,
- B): w rit et he set s A
- B): ë
- B,A: B,A
- B,A: ê
- B,A: B,A
- B,A: B an d B
- A.: A.
- A.: (
- A.: Ma y 2022
- A.:)
- A.: 10.
- A.: Fro mt h egi v en w hen di ag ram,
- A.: w rit et he set s A

- A.: ë

- B,A: B,A

- B,A: ê

- B,A: B,A

- B,A: B and B

- A.: A.

- A.: (

- AU G.2 022: AU G.2 022

- AU G.2 022:)

- A: A

- B: B

- J: J

- J: c

- J: f

- J: a

- J: d

- J: h

- J: b

- J: e

- J: g

- A: A

- B: B

- J: J

- J: 1

- J: 5
- J: 2
- J: 12
- J: 3
- J: 6
- J: 7
- J: 9
- J: 8
- J: 11
- J: 10
- J: 4
- SE TS: SE TS
- SE TS: 1
- SE TS: 3
- SE TS: 5
- SE TS: 2
- SE TS: 4
- SE TS: 6
- SE TS: 8
- SE TS: 9
- SE TS: 10
- A: A
- B: B
- J: J

- J: 2
- J: 4
- J: 8
- J: 10
- J: 6
- J: 12
- J: 3
- J: 9
- J: 15
- J: 1
- J: 11
- A: A
- B: B
- J: J
- J: M arch 201 5 to
- J: r t
- J: 4
- J: t
- J: J
- UN E: UN E
- UN E: ĩ t r t
- UN E: 4
- UN E: part
- UN E: -

- UN E: b

- UN E: 1.

- UN E: In venn di ag ramg iv en belo w (

- UN E:)

- A.: A.

- A: A

- A: ë

- B =: B =

- B =: ö

- B.: B.

- A: A

- A: ë

- B =: B =

- J: J

- C.: C.

- A: A

- A: ê

- B =: B =

- J: J

- D.: D.

- A: A

- A: ê

- B =: B =

- B =: ö

- B =: 2.
- B =: Set A = {F,
- L, W, : L, W,
- L, W, : O } Which of the following is not a set
- L, W, : builder form for set A (
- L, W, :)
- A.: A.
- A.: {
- A.: x
- A.: :
- A.: x
- A.: is a letter from the world FOLLOW}
- B.: B.
- B.: {
- B.: x
- B.: :
- B.: x
- B.: is a letter from the world FLOW}
- C.: C.
- C.: {
- C.: x
- C.: :
- C.: x
- C.: is a letter from the world

- WOL F}: WOL F}
- D.: D.
- D.: {
- D.: x
- D.: :
- D.: x
- D.: is al et ter fromt h ewo rld
- SL O W}: SL O W}
- SL O W}: 3.
- SL O W}: If th eun io n o f two set s i s on e oft he set its elf,t hen t he relati on b etw een
- SL O W}: i n th e two sets is ____ _ (
- SL O W}:)
- A.: A.
- A.: O ne set is a sub s et o fo th ers et
- B.: B.
- B.: D isj oi nt sets
- C.: C.
- C.: E qu al nu mb ero f el ement s o f bot h t he set s
- D.: D.
- D.: E mp ty sets
- D.: 4.
- D.: Wh i ch on eo f th e fol lo win g i s t he exampl e of fin it es et? (
- D.:)
- A.: A.

- A.: {
- A.: x
- A.: /
- A.: x
- A.: N and
- A.: x
- A.: 2
- A.: = 9}
- B.: B.
- B.: Set of rational numbers between 2 and 3.
- C.: C.
- C.: Set of all multiples of even prime numbers .
- D.: D.
- D.: Set of all odd
- D.: prime numbers .
- D.: 5.
- D.: Number of sub
- D.: -
- D.: sets of sets
- D.: \emptyset
- D.: is (
- D.:)
- A.: A.
- A.: 0

- B.: B.

- B.: 1

- C.: C.

- C.: 3

- D.: D.

- D.: 4

- D.: 6.

- D.: Which one of the following

- D.: statements

- D.: is

- D.: false? (

- D.:)

- A.: A.

- A.: Every set is subset of itself

- B.: B.

- B.: Empty set is subset of every set

- C.: C.

- C.: Intersection of two disjoint sets is empty set

- D.: D.

- D.: Cardinal number of an infinite set is zero .

- D.: 7.

- S =: S =

- D: D

- D: u

- D: á
- N: N
- N: á
- N: $\frac{3}{4}$
- N: t
- N: á
- F: F
- F: w
- F: á
- F: u
- E: E
- E: $\frac{3}{4}$
- E: y
- E: á
- E: 6
- E: ;
- E: E
- E: rati on al
- E: nu mb ers ?
- E: (
- E:)
- A.: A.
- D: D
- D: u

- D: á

- N: N

- N: á

- N: 6

- N: ;

- N: á

- F: F

- F: w

- F: á

- F: u

- E: E

- E: $\frac{3}{4}$

- E: y

- E: E

- B.: B.

- B.: [

- B.: u

- E: E

- E: $\frac{3}{4}$

- E: y

- E: á

- E: $\frac{3}{4}$

- E: t

- E: á

- N: N
- N: _
- C.: C.
- C.: [
- C.: u
- C.: á
- N: N
- N: á
- N: $\frac{3}{4}$
- N: t
- N: _
- D.: D.
- D: D
- D: u
- D: á
- F: F
- F: w
- F: á
- F: á
- F: 6
- F: ;
- E: E
- E: 8.
- E: Fro mt h eV enn di ag ram,A

- E: \ddot{e}

- B = \therefore B =

- B = \therefore (

- B = \therefore)

- A.: A.

- A.: {5, 6}

- B.: B.

- B.: {5, 6, 7, 8 }

- C.: C.

- C.: \ddot{o}

- D.: D.

- D.: {7, 8}

- D.: 9.

- D.: If A

- B,: B,

- B,: th en A

- B,: \hat{e}

- B= \therefore B=

- B= \therefore (

- B= \therefore)

- A.: A.

- A: A

- B.: B.

- B: B

- C.: C.
- C.: ö
- D.: D.
- J: J
- J: 10.
- J: The number of subsets of A is 16, then the
- J: set has _____ elements. (
- J:)
- A.: A.
- A.: 1
- B.: B.
- B.: 2
- C.: C.
- C.: 3
- D.: D.
- D.: 4
- D.: 11.
- D.: If A
- D.: ?
- B,: $B,$
- B,: n
- B,: $(A) = 12$ and
- B,: n
- B,: $(B) = 20$, then the value of

- B, : n
- (B: (B
- (B: A)i s (
- (B:)
- A.: A.
- A.: 32
- B.: B.
- B.: 8
- C.: C.
- C.: 8
- D.: D.
- D.: 32
- D.: 12.
- D.: If set A an d Bare disj oi nt s ets an d
- D.: n
- (A) =6 ,: (A) =6 ,
- (A) =6 ,: n
- (B) =: (B) =
- (B) =: 5 ,th en
- (B) =: n
- (A: (A
- (A: ë
- (A: B) is (
- (A:)

- A.: A.

- A.: 11

- B.: B.

- B.: 6

- C.: C.

- C.: 5

- D.: D.

- D.: 1

- D.: 13.

- D.: Wh i ch of th e

- D.: fo ll owin g i s t ru e

- D.: ?

- D.: (

- D.:)

- A.: A.

- A.: ö

- A.: = 0

- B.: B.

- B.: ö

- B.: = {

- B.: }

- C.: C.

- C.: ö

- C.: = { 0 }

- D.: D.

- D.: Both A and C.

- A: A

- A: 6

- A: 5

- B: B

- B: 8

- B: 7

- B: 9

- B: ,

- B: 10

- J: J

- J: 1 ,3

- J: 5

- J: ,

- J: 7

- A: A

- B: B

- B: 2

- B: ,

- B: 4

- B: 6

- B: ,

- B: 8

- SE TS: SE TS
- SE TS: M arch 201 5 to
- SE TS: r t v
- SE TS: t
- J: J
- UN E: UN E
- UN E: ĩ t r t
- UN E: 4
- UN E: 14.
- UN E: If A
- UN E: ?
- UN E: B,th en A
- B =_ ____ ____: B =_ ____ ____
- B =_ ____ ____: (
- B =_ ____ ____:)
- A.: A.
- A: A
- B.: B.
- B: B
- C.: C.
- B: B
- A: A
- D.: D.
- ĩ: ĩ

- $\hat{I}: 15.$
- $\hat{I}: \text{If } A = \{$
- $\hat{I}: x$
- $\hat{I}: :$
- $\hat{I}: x$
- $\hat{I}: 2$
- $\hat{I}: 16 = 0,$
- $\hat{I}: x$
- $\mathfrak{D}: \mathfrak{D}$
- $\mathfrak{D}: R\}$ and $B = \{$
- $\mathfrak{D}: x$
- $\mathfrak{D}: :$
- $\mathfrak{D}: x$
- $\mathfrak{D}: 2$
- $\mathfrak{D}: 5$
- $\mathfrak{D}: x$
- $\mathfrak{D}: +6 = 0,$
- $\mathfrak{D}: x$
- $\mathfrak{D}: \mathfrak{D}$
- $\mathfrak{D}: R\}, \text{ then } A$
- $\mathfrak{D}: :$
- $\mathfrak{D}: B \text{ is a } __ ($
- $\mathfrak{D}:)$
- $A.: A.$

- A.: Singleton set .
- B.: B.
- B.: Infinite set .
- C.: C.
- C.: Null set .
- D.: D.
- D.: Finite set .
- D.: 16.
- D.: If
- D.: the number of
- D.: subsets of
- D.: a given set is 32 , then the number of elements in the
- D.: set will
- D.: be (
- D.:)
- A.: A.
- A.: 2
- B.: B.
- B.: 4
- C.: C.
- C.: 5
- D.: D.
- D.: 3
- D.: 17.

- D.: If $A = \{$
- D.: x
- D.: $:$
- D.: x
- D.: is a day of a week $\}$
- D.: then
- D.: n
- $(A) =: (A) =$
- $(A) =: \dots\dots\dots$
- $(A) =: ($
- A: A
- A: ug
- A: 2
- A:)
- A.: A.
- A.: 6
- B.: B.
- B.: 4
- C.: C.
- C.: 5
- D.: D.
- D.: 7
- D.: 18.
- D.: The roster form of the set A

- $D := \{$
- $D := x$
- $D := :$
- $D := x$
- $D := =$
- $D := n$
- $D := 2$
- $D := ,$
- $D := n$
- $D := N, n < 5 \}$ is
- $D := .$
- $D := .$
- $D := .$
- $D := .$
- $D := ($
- $D :=)$
- $A := A.$
- $A = \{1, 4, 9, 16, 25\} : A = \{1, 4, 9, 16, 25\}$
- $B := B.$
- $A = \{0, 1, 4, 9, 16\} : A = \{0, 1, 4, 9, 16\}$
- $C := C.$
- $A = \{1, 4, 9, 16\} : A = \{1, 4, 9, 16\}$
- $D := D.$
- $A = \{0, 1, 4, 9, 16, 25\} : A = \{0, 1, 4, 9, 16, 25\}$

- $A = \{0, 1, 4, 9, 16, 25\}$: 19.

- $A = \{0, 1, 4, 9, 16, 25\}$: The roster form of the set $A = \{$

- $A = \{0, 1, 4, 9, 16, 25\}$: x

- $A = \{0, 1, 4, 9, 16, 25\}$: :

- $A = \{0, 1, 4, 9, 16, 25\}$: x

- N , : N ,

- N , : -

- N , : x

- N , :)

- A : A .

- A : {

- A : $2, 2\}$

- B : B .

- B : {

- B : 2 ,

- B : $1, 0, 1, 2$

- B : }

- C : C .

- C : {

- C : $1, 0, 1\}$

- D : D .

- D : {

- D : 2 ,

- D : $1, 1, 2\}$

- D.: 20.

- D.: __ __

- A.: A.

- A.: 10

- B.: B.

- B.: 7

- C.: C.

- C.: 8

- D.: D.

- D.: 6

- D.: 21.

- D.: If A and B are disjoint sets and

- D.: n

- $(A) = (A) =$

- $(A) = 5$

- $(A) = ,$

- $(A) = n$

- $(A: (A$

- $(A: \ddot{e}$

- $B) = B) =$

- $B) = 8$

- $B) = , \text{ then}$

- $B) = n$

- $(B): (B)$

- (B): =

- (B): (

- (B):)

- A.: A.

- A.: 3

- B.: B.

- B.: 4

- C.: C.

- C.: 5

- D.: D.

- D.: 7

- POLYNOMIALS: POLYNOMIALS

- 1 M: 1 M

- ARK: ARK

- ARK: 1.

- ARK: If

- ARK: x

- ARK: 1,

- ARK: then find the quotient of

- ARK:

- p: p

- p: >

- p:

- y: y

- Ý: >

- Ý:

- Ü: Ü

- Ü: >

- Ü:

- Ô: Ô

- Ô:

- Ü: Ü

- Ü: >

- Ü:

- Ô: Ô

- Ô: >

- Ô:

- Ô: >

- Ó: Ó

- Ó: (

- Ó:)

- Ó: 2.

- Ó: J u s ti fy th e above st at ement by g iv ing on e ex ampl e. (

- Ó:)

- Ó: 3.

- Ó: Wri t e an

- Ó: ex ampl e for aq u ad rati c Poly no mi al t hat h as

- Ó: no zero s .(

- Ú:)

- Ú: 4.

- Ú: If

- Ú: p

- Ú: (

- Ú: x

- Ú:) =

- Ú: x

- Ú: 3

- Ú: 3

- Ú: x

- Ú: 2

- Ú: + 2

- Ú: x

- Ú: 3

- Ú: is ap ol yno mi al ,th en fin d t he valu e of

- Ú: p

- Ú: (1). (

- Ú:)

- Ú: 5.

- Ú: Srikar says th at th e ord ero f th e pol yno mi al

- Ú: (

- Ú: x

- Ú: 2

- Ú: 5)(
- Ú: x
- Ú: 3
- Ú: +1) is 6 .D o yo u ag ree wi th him?
- Ú: 6.
- Ú: Fi nd zeros
- Ú: o ft he po ly no mi al P(
- Ú: x
- Ú:) =
- Ú: x
- Ú: 2
- Ú: 4. (
- Ú:)
- Ú: 7.
- Ú: V eri fy th e rel atio n
- Ú: b et ween zeros
- Ú: an d co effi cient s o f th equ adratic poly no mi al
- Ú: is
- Ú: x
- Ú: 2
- Ú: 4.
- Ú: 8.
- Ú: Weath er
- Ú: 5

- Ú: 6

- Ú: an d 1 al l zeros oft he po lyn omi al

- Ú: p

- Ú: (

- Ú: x

- Ú:) =2

- Ú: x

- Ú: 2

- Ú: 3

- Ú: x

- Ú: +1 or not?J us ti fy .(

- Ú:)

- Ú: 9.

- Ú: If P(

- Ú: x

- Ú:) =

- Ú: x

- Ú: 4

- Ú: +1 ,th en find P(2)

- P(: P(

- P(: -

- P(: 2). (

- P(:)

- P(: 10.

- $P(3, 0)$ and 2 are
- P (: the zeroes of the polynomial p (
- P (: x
- P (:) =
- P (: x
- P (: 3
- P (: + (
- P (: a
- P (: 1)
- P (: x
- P (: 2
- P (: +
- P (: bx
- P (: + c Find
- P (: a
- P (: and
- P (: c
- P (: .
- P (: 11 .
- P (: Write any two linear polynomials having one term
- P (: a
- P (: and three terms .
- P (: (
- P (:)

- P(12.

- P(If

- P(p

- P((

- P(x

- P() =

- P(x

- P(2

- P(+ 3

- P(x

- P(+ 4, then find the values of

- P(p

- P(0) and

- P(p

- P(1).

- P((

- P(May 2022

- P()

- P(13.

- P(If

- P(p

- P((

- P(x

- P() =2

- P(: x
- P(: 2
- P(: +5
- P(: x
- P(: 7 , th en fi nd th ev alu eof
- P(: p
- P(: (0) and
- P(: p
- P(: (1).
- P(: (
- P(: A ug
- P(: 2 022
- P(:)
- P(: (
- P(:)
- P(: (
- P(:)
- SE TS /: SE TS /
- P O LYNO MIA LS: P O LYNO MIA LS
- P O LYNO MIA LS: M arch 201 5 to
- P O LYNO MIA LS: Jun e 20 2
- P O LYNO MIA LS: 4
- P O LYNO MIA LS: t
- J: J

- UN E: UN E

- UN E: $\ddot{t} r t$

- UN E: 4

- F: 1.

- F: L ak sh mi do es no t w an t t o

- F: d is cl os et he lengt h ,b reat h t he hei ght of acub oi d o fh er project .sh e

- F: h as con st ru ct ed

- F: a po ly no mi al

- F: x

- F: 3

- F: 6

- F: x

- F: 2

- F: + 11

- F: x

- F: 6 b y t ak ing th e val u es o f leng th ,b reath and hei ght

- F: as it s zeros .Can you opent h es ecret [i .e.,fi nd th e measu res o f leng th ,b reath on th e

- F: hei ght

- F: ?

- F: 2.

- F: D raw th eg rap h fo rt he poly no mi al

- F: p

- F: (

- F: x

$$- F:) =$$

$$- F: x$$

$$- F: 2$$

$$- F: + 3$$

$$- F: x$$

$$- F: 4 \text{ and find its zeroes from the graph.}$$

$$- F: ($$

$$- F:)$$

$$- F: 3.$$

$$- F: \text{Draw the graph of the polynomial}$$

$$- F: p$$

$$- F: ($$

$$- F: x$$

$$- F:) = 3$$

$$- F: x$$

$$- F: 2$$

$$- F: + 2$$

$$- F: x$$

$$- F: 1 \text{ on the graph paper. Find its zeroes from the}$$

$$- F: \text{graph. (}$$

$$- F:)$$

$$- F: 4.$$

$$- F: \text{Draw the graph for the polynomial}$$

$$- F: p$$

- F: (
- F: x
- F:) =
- F: x
- F: 2
- F: 3
- F: x
- F: + 2 and find the zeroes from the graph. (
- F:)
- F: 5.
- F: Draw the graph of the polynomial
- F: p
- F: (
- F: x
- F:) =
- F: x
- F: 2
- F: 5
- F: x
- F: + 4 on the graph paper. Find its zeros from the
- F: graph. (
- F:)
- F: 6.
- F: On dividing by

- F: x

- F: 3

- F: 3

- F: x

- F: 2

- F: + 5

- F: x

- F: 7 by

- F: x

- F: 2

- F: 2

- F: x

- F: + 4, If the remainder is in the form of A

- F: x

- F: + B, find

- F: the values of A and B. (

- F:).

- F: 7.

- F: Divide 3

- F: x

- F: 4

- F: 5

- F: x

- F: 3

- F: + 4
- F: x
- F: 2
- F: + 3
- F: x
- F: 5 by
- F: x
- F: 2
- F: 3 and verify the division
- F: algorithm.(
- F:)
- F: 8.
- F: Draw the graph of the polynomial
- F: p
- F: (
- F: x
- F:) =
- F: x
- F: 2
- F: 5
- F: x
- F: + 6
- F: and find the zeros from the
- F: graph.(

- F:)
- F: 9.
- F: Draw the graph of
- F: p
- F: (
- F: x
- F:) =
- F: x
- F: 2
- F: 2
- F: x
- F: 8 and find the zeros of the polynomial from it .(
- F:)
- F: 10.
- F: Total number of pencils required are given by 4
- F: x
- F: 4
- F: + 2
- F: x
- F: 3
- F: 2
- F: x
- F: 2
- F: +62

- F: x

- F: -

- F: 66 .

- F: If each

- F: box contains

- F: x

- F: 2

- F: + 2

- F: x

- F: 3

- F: pencils ,then find the number of boxes to be purchased . (

- F:)

- F: 11.

- F: Draw the graph of the Quadratic polynomial

- F: p

- F: (

- F: x

- F:) =

- F: x

- F: 2

- F: +

- F: x

- F: 12 and find the zeroes of the

- F: polynomial from the graph .

- F: (
- F:)
- F: (
- F:)
- P O L Y N O M I A L S: P O L Y N O M I A L S
- P O L Y N O M I A L S: M arch 201 5 to
- P O L Y N O M I A L S: Jun e 20 2
- P O L Y N O M I A L S: 4
- P O L Y N O M I A L S: t
- J: J
- UN E: UN E
- UN E: i t r t
- UN E: 4
- UN E: 12.
- UN E: D raw th eg rap h o f the quad rati c pol yno mial
- UN E: p
- UN E: (
- UN E: x
- UN E:) =
- UN E: x
- UN E: 2
- UN E: +
- UN E: x
- UN E: 6 and find th e zero es oft he

- UN E: p oly no mi al from th eg rap h .
- UN E: 13.
- UN E: D raw t he graph o f the po lyn omi al
- UN E: p
- UN E: (
- UN E: x
- UN E:)
- UN E: =
- UN E: x
- UN E: 2
- UN E: +
- UN E: x
- UN E: 2
- UN E: on t he graph p aper. Fi nd i ts zeroes fro m th e
- UN E: g rap h .
- UN E:)
- UN E: 14.
- UN E: D raw th eg rap h o f the
- UN E: p oly no mi al p
- UN E: (
- UN E: x
- UN E:) =
- UN E: x
- UN E: 2

- UN E: 7
- UN E: x
- UN E: $+ 12$, then find its zeroes from the graph.
- UN E: 15.
- UN E: Draw the graph of the polynomial
- UN E: p
- UN E: (
- UN E: x
- UN E: $) =$
- UN E: x
- UN E: 2
- UN E: $+ 2$
- UN E: x
- UN E: 3 and find the zeroes of the polynomial from
- UN E: the
- UN E: graph.
- UN E: (
- UN E: May 20 22
- UN E:)
- UN E: 16.
- UN E: Draw the graph of the quadratic polynomial
- UN E: p
- UN E: (
- UN E: x

- UN E:)=
- UN E: x
- UN E: 2
- UN E: 4
- UN E: x
- UN E: + 3 and find the zeroes of the
- UN E: polynomial from the graph
- UN E: .
- UN E: 17.
- UN E: Draw the graph of the polynomial
- UN E: p
- UN E: (
- UN E: x
- UN E:) =
- UN E: x
- UN E: 2
- UN E: x
- UN E: 2 and find the zeros of the polynomial from the
- UN E: graph .
- UN E: (
- UN E: Aug 20 22
- UN E:)
- UN E: part
- UN E: b

- UN E: 1.

- UN E: T he qu ad rat i c

- UN E: po ly nomi al ,wh os e

- UN E: zeros are 2 and 3,i s (

- UN E:)

- A.: A.

- A.: x

- A.: 2

- A.: 5

- A.: x

- A.: 6

- B.: B.

- B.: x

- B.: 2

- B.: + 5

- B.: x

- B.: 6

- C.: C.

- C.: x

- C.: 2

- C.: 5

- C.: x

- C.: + 6

- D.: D.

- D.: x

- D.: 2

- D.: + 5

- D.: x

- D.: +6

- D.: 2.

- D.: Which of the following is a polynomial with only one zero ? (

- D.:)

- A.: A.

- A.: p

- A.: (

- A.: x

- A.: $) = 2$

- A.: x

- A.: 2

- A.: 3

- A.: x

- A.: + 4

- B.: B.

- B.: p

- B.: (

- B.: x

- B.: $) =$

- B.: x

- B.: 2

- B.: 2

- B.: x

- B.: + 1

- C.: C.

- C.: p

- C.: (

- C.: x

- C.:) =2

- C.: x

- C.: + 3

- D.: D.

- D.: p

- D.: (

- D.: x

- D.:) =5

- D.: 3.

- D.: The coefficient of

- D.: x

- D.: 7

- D.: In polynomial 7

- D.: x

- D.: 17

- D.: 17

- D.: x

- D.: 11

- D.: + 27

- D.: x

- D.: 5

- D.: 7 is

- D.: (

- D.:)

- A.: A.

- A.: 1

- B.: B.

- B.: 0

- C.: C.

- C.: 7

- D.: D.

- D.: 17

- D.: 4.

- D.: Observe the given rectangular figure, then its area in polynomial function is ... (

- D.:)

- A.: A.

- A(: A(

- A(: x

- A(:) =

- A(: x

- A(: 2

- A(: + 7

- A(: x

- A(: + 30

- B.: B.

- A(: A(

- A(: x

- A(:) =

- A(: x

- A(: 2

- A(: + 7

- A(: x

- A(: + 30

- C.: C.

- A(: A(

- A(: x

- A(:) =

- A(: x

- A(: 2

- A(: 7

- A(: x

- A(: +3 0

- D.: D.

- A(: A(

- A(x

- A() =

- A(x

- A(2

- A(7

- A(x

- A(+ 30

- A(5.

- A(The following is the graph of a polynomial. Find the zeros of the polynomial from the given

- A(graph

- A((

- A()

- A.: A.

- A.: 2 , 3

- B.: B.

- B.: 1 , 3

- C.: C.

- C.: 2 , 1

- D.: D.

- D.: 3 , 0

- D.: Observe the following graphs (

- D.:)

- D.: Which of them are the graphs of quadratic polynomials?

- A.: A.

- A.: (i),(ii)
- A.: and (ii i)
- B.: B.
- B.: (i) and (i ii)
- C.: C.
- C.: (i) and (i v)
- D.: D.
- D.: (i),(ii i) and (i v)
- X: X
- X: 1
- Y: Y
- Y: Y
- Y: 1
- O: O
- O: -
- O: 2
- O: 1
- O: 3
- O: 2
- O: 1
- O: $y = f(x)$
- X: X
- X: X
- X: 1

- Y: Y

- Y: Y

- Y: 1

- O: O

- O: (i)

- X: X

- X: X

- X: 1

- Y: Y

- Y: Y

- Y: 1

- O: O

- O: (iii)

- O: $y = p(x)$

- X: X

- X: X

- X: 1

- Y: Y

- Y: Y

- Y: 1

- O: O

- O: (iv)

- O: $y = q(x)$

- O: $y = g(x)$

- O: (ii)

- X: X

- X: X

- X: 1

- Y: Y

- Y: Y

- Y: 1

- O: O

- O: x

- O: + 3

- O: 10

- O: x

- O: (

- O:)

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- P O L Y N O M I A L S: M arch 201 5 to

- P O L Y N O M I A L S: Jun e 20 2

- P O L Y N O M I A L S: 4

- P O L Y N O M I A L S: t

- J: J

- UN E: UN E

- UN E: ï t r t

- UN E: 4

- UN E: 6.

- UN E: T he qu ad rat i cpo ly nomi al havi ng

- Ú: Ú

- Ü: Ü

- Ü: an d

- Ú: Ú

- Ô: Ô

- Ô: as it s zeros is

- Ô: (

- Ô:)

- A.: A.

- A.: x

- A.: 2

- A.: +

- A.: 9

- A.: ë

- A.: >

- A.: 5

- A.: :

- B.: B.

- B.: 6

- B.: x

- B.: 2

- B.: 5

- B.: x

- B.: + 1

- C.: C.

- C.: x

- C.: 2

- C.: 9

- C.: ë

- C.: ?

- C.: 5

- C.: :

- D.: D.

- D.: 6

- D.: x

- D.: 2

- D.: 5

- D.: x

- D.: 1

- D.: 7.

- D.: Su mo f zero s o f apoly no mi al

- D.: x

- D.: 3

- D.: 2

- D.: x

- D.: 2

- D.: +3

- D.: x

- D.: 4 is (

- D.:)

- A.: A.

- A.: 2

- B.: B.

- B.: 2

- C.: C.

- C.: 1

- D.: D.

- D.: 4

- D.: 8.

- D.: The graph presented by

- D.: y

- D.: =

- D.: x

- D.: is (

- D.:)

- D.: 9.

- D.: The number of zeros of the polynomial, whose graph is given below (

- D.:)

- A.: A.

- A.: 0

- B.: B.

- B.: 1
- C.: C.
- C.: 2
- D.: D.
- D.: 3
- D.: 10.
- D.: If the polynomial
- D.: $p(x)$
- D.: =
- D.: x
- D.: 3
- D.: x
- D.: 2
- D.: + 3
- D.: x
- D.: +
- D.: k
- D.: is
- D.: divided by (
- D.: x
- D.: 1), the remainder obtained is 3, then the
- D.: value of
- D.: k
- D.: is (

- D.:)
- A.: A.
- A.: 0
- B.: B.
- B.: 1
- C.: C.
- C.: 3
- D.: D.
- D.: 3
- D.: 11.
- D.: In division ,
- D.: if
- D.: division
- D.: or
- D.: is (
- D.: x
- D.: +1),quotient is
- D.: x
- D.: and
- D.: remainder is 4 then dividend is (
- D.:)
- A.: A.
- A.: x
- A.: 2

- A.: +

- A.: x

- B.: B.

- B.: 4(

- B.: x

- B.: +1) +

- B.: x

- C.: C.

- C.: x

- C.: (

- C.: x

- C.: +1) +4

- D.: D.

- D.: 4

- D.: x

- D.: + 4

- D.: 12.

- D.: If

- D.: p

- D.: (

- D.: x

- D.:) =

- D.: x

- D.: 2

- D.: 4
- D.: x
- D.: +5 ,
- D.: then the value of
- D.: p
- D.: (1)i s (
- D.:)
- A.: A.
- A.: 1
- B.: B.
- B.: 0
- C.: C.
- C.: 1
- D.: D.
- D.: 2
- D.: 13.
- D.: If
- D.: =
- D.: ,
- D.: >
- D.: are the zeroes of the polynomial
- D.: x
- D.: 2
- D.: + 5

- D.: x

- D.: +

- D.: k

- D.: an d

- D.: =

- D.: >

- D.: = 3, th en th e valu e of

- D.: k

- D.: . .

- D.: (

- D.:)

- A.: A.

- A.: 6

- B.: B.

- B.: 9

- C.: C.

- C.: 5

- D.: D.

- D.: 4

- D.: 14.

- D.: Th e

- D.: p ol yno mi al

- D.: p

- D.: (

- D.: x
- D.: $)=$
- D.: x
- D.: 4
- D.: 2
- D.: x
- D.: 3
- D.: x
- D.: 2
- D.: 1 is divided by (
- D.: x
- D.: $+1$) then the degree of quotient
- D.: polynomial is (
- D.:)
- A.: A.
- A.: 1
- B.: B.
- B.: 3
- C.: C.
- C.: 4
- D.: D.
- D.: 2
- D.: 15.
- D.: From the graph, the zeros of

- D.: the polynomial are.....(

- D.:)

- A.: A.

- A.: 2

- B.: B.

- B.: 0

- C.: C.

- C.: 2

- D.: D.

- D.: All the above

- D.: 16.

- D.: The coefficient of

- D.: x

- D.: 3

- D.: in the polynomial 2

- D.: x

- D.: 4

- D.: 5

- D.: x

- D.: 3

- D.: + 6

- D.: x

- D.: 2

- D.: +5 is

- D.: (

- D.: Ma y 20 22

- D.:)

- A.: A.

- A.: 5

- B.: B.

- B.: 5

- C.: C.

- C.: 6

- D.: D.

- D.: 2

- D.: 17.

- D.: T he deg ree oft h epo ly no mi al

- D.: p

- D.: (

- D.: x

- D.:) =3

- D.: x

- D.: 3

- D.: + 0.

- D.: x

- D.: 4

- D.: + 0.

- D.: x

- D.: 2

- D.: x

- D.: 2

- D.: (

- D.: A ug 20 22

- D.:)

- A.: A.

- A.: 1

- B.: B.

- B.: 2

- C.: C.

- C.: 3

- D.: D.

- D.: 4

- X: X

- Y: Y

- A.: A.

- X: X

- Y: Y

- B: B

- B: .

- X: X

- Y: Y

- C: C

- C: .

- X: X

- Y: Y

- D: D

- D: .

- O: O

- O: O

- X: X

- X: X

- X: 1

- Y: Y

- Y: 1

- Y: Y

- Y: 1

- Y: 2

- Y: 1

- Y: 2

- P O L Y N O M I A L S: P O L Y N O M I A L S

- P O L Y N O M I A L S: M arch 201 5 to

- P O L Y N O M I A L S: r t

- P O L Y N O M I A L S: 4

- P O L Y N O M I A L S: t

- J: J

- J: 202

- J: 4
- J: 18.
- J: If the zeroes of the polynomial
- J: x
- J: 2
- J: + (
- J: a
- J: +1)
- J: x
- J: +
- J: b
- J: are 2 and
- J: 3, then the values of
- J: a
- J: and
- J: b
- J: are.....
- A.: A.
- A.: a
- A.: =
- A.: 5 ,
- A.: b
- A.: =
- A.: 1

- B.: B.

- B.: a

- B.: = 5,

- B.: b

- B.: =

- B.: 1

- C.: C.

- C.: a

- C.: =

- C.: 2 ,

- C.: b

- C.: =6

- D.: D.

- D.: a

- D.: = 0,

- D.: b

- D.: =

- D.: 6

- D.: 19.

- D.: If

- D.: x

- D.: 4

- D.: + 3

- D.: x

- D.: 2
- D.: + 7 is divided by
- D.: x
- D.: +3, then the possible degrees of quotient and remainder are.
- A.: A.
- A.: 3, 0
- B.: B.
- B.: 4, 1
- C.: C.
- C.: 3, 1
- D.: D.
- D.: 4, 0
- D.: 20.
- D.: If the length and breadth of a
- D.: rectangle are (
- D.: x
- D.: + 5) and (
- D.: x
- D.: + 2) respectively (
- D.: x
- D.: > 0) then its area
- D.: is represented by (
- D.:)
- A.: A.

- A.: x

- A.: 2

- A.: + 5

- A.: x

- A.: +10

- B.: B.

- B.: x

- B.: 2

- B.: + 7

- B.: x

- B.: +10

- C.: C.

- C.: x

- C.: 2

- C.: + 2

- C.: x

- C.: +10

- D.: D.

- D.: x

- D.: 2

- D.: + 10

- D.: x

- D.: +1 0

- D.: 21.

- D.: If

- D.: p

- D.: (

- D.: x

- D.:) =5

- D.: x

- D.: 4

- D.: + 6

- D.: x

- D.: 2

- D.: +3

- D.: x

- D.: 7 ,th en

- D.: p

- D.: (0)i s _ _ _

- A.: A.

- A.: 5

- B.: B.

- B.: 3

- C.: C.

- C.: 6

- D.: D.

- D.: 7

- D.: 22.

- D.: The degree of the polynomial, whose graph is given in figure ____

- A.: A.

- A.: 1

- B.: B.

- B.: 2

- C.: C.

- C.: 3

- D.: D.

- D.: 0

- D.: Pa irof Linear Equatio ns in T w o Variables

- J: 1.

- J: So lv et he fol low ing pai r of equ at ion s b y red ucin g th em to ap air of li near eq uati ons

- J: 9

- J: 6

- J: ?

- J: 5

- E: E

- E: 5

- E: 1

- E: ?

- E: 6

- E: = 2 and

- E: :

- E: 6

- E: ?

- E: 5

- F: F

- F: 7

- F: i

- F: ?

- F: 6

- F: = 1 (

- F:)

- F: 2.

- F: Draw a graph for the following pair of linear equations in two variables and find their solution

- F: from the graph 2

- F: x

- F: +

- F: y

- F: = 5 and

- F: 3

- F: x

- F: 2

- F: y

- F: = 4 (

- F:)

- F: 3.

- F: Draw the graphs of the following equations 3

- F: x
- F: y
- F: $2 = 0$ and 2
- F: x
- F: $+$
- F: y
- F: $8 = 0$ on the graph
- F: paper.
- F: (
- F: i) Write down the co
- F: -
- F: ordinates of the point of intersection of the equations.
- F: (
- F: i i) Find the area of the triangle formed by the lines and the x
- F: -
- F: axis. (
- F:)
- F: 4.
- F: Draw the graph for the equations 2
- F: x
- F: $3y = 5$ and 4
- F: x
- F: 6
- F: y

- F: = 15 on the graph paper and check

- F: whether they are consistent or not. (

- F:)

- F: (

- F:)

- PAIR OF LINEAR EQUATIONS: PAIR OF LINEAR EQUATIONS

- PAIR OF LINEAR EQUATIONS: March 2015 to

- PAIR OF LINEAR EQUATIONS: r t

- PAIR OF LINEAR EQUATIONS: 4

- PAIR OF LINEAR EQUATIONS: t

- J: J

- J: 202

- J: 4

- J: 5.

- J: Draw the graph for the following pair of linear equations in two variables and find their

- J: solution from the graph.3

- J: x

- J: 2

- J: y

- J: =2 and 2

- J: x

- J: +

- J: y

- J: = 6 (

- J:)

- J: 6.

- J: Draw the graph for the equations 2

- J: x

- J: y

- J: $4 = 0$ and

- J: x

- J: +

- J: y

- J: +1

- J: = 0 on the graph paper and check

- J: whether they are consistent or not . (

- J:)

- J: 7.

- J: Draw the graph of 2

- J: x

- J: +

- J: y

- J: = 6 and 2

- J: x

- J: y

- J: $+2 = 0$ and find the solution from the graph .(

- J:)

- J: 8.

- J: Show that the following pair of equations are consistent and show the equilibrium call y
- J: x
- J: + 3
- J: y
- J: = 6
- J: and 2
- J: x
- J: 3
- J: y
- J: = 12 (
- J:)
- J: 9.
- J: Find the solution
- J: of
- J: x
- J: + 2
- J: y
- J: = 10 and 2
- J: x
- J: +4
- J: y
- J: =
- J: 8
- J: graphically (

- J:)
- J: 10.
- J: So lv e
- J: 9
- J: ë
- J: ?
- J: 5
- E: E
- E: 5
- E: ì
- E: ?
- E: 6
- L: L
- L: 2 and
- L: :
- L: ë
- L: ?
- L: 5
- F: F
- F: 5
- F: ì
- F: ?
- F: 6
- L: L

- L: 1
- L: (
- L:)
- L: 11.
- L: So l v et he fol low ing pai r of li n ear eq u ati on s by g rap h metho d .
- L: 2
- L: x
- L: +
- L: y
- L: = 6
- L: an d 2
- L: x
- L: y
- L: + 2 = 0.
- (J: (J
- (J: 18
- (J:)
- (J: 12.
- (J: So l v et he equ at ion s by graph ically 3
- (J: x
- (J: +4
- (J: y
- (J: =
- (J: 1 0 and

- (J: 4
- (J: x
- (J: 3
- (J: y
- (J: = 5. (
- (J:)
- (J: 13.
- (J: Draw the graph
- (J: of
- (J: x
- (J: +
- (J: y
- (J: = 11 and
- (J: x
- (J: y
- (J: =5. Find the solution of the pair of linear equations .
- (J: part b
- (J: 1.
- (J: Which of the following is not a linear equation ? (
- (J:)
- A.: A.
- A.: $5 + 4$
- A.: x
- A.: =

- A.: y

- A.: + 3

- B.: B.

- B.: x

- B.: + 2

- B.: y

- B.: =

- B.: y

- B.: x

- C.: C.

- C.: 3

- C.: x

- C.: =

- C.: y

- C.: 2

- C.: + 4

- D.: D.

- D.: x

- D.: +

- D.: y

- D.: = 0

- D.: 2.

- D.: A pair of linear equations in two variables are 2

- D.: x

- D.: y
- D.: =4 and 4 x
- D.: $2y =$
- D.: 6 .T his
- D.: p ai ro f
- D.: equ atio ns are..... (
- D.:)
- A.: A.
- A.: Con si st en t equ atio ns
- B.: B.
- B.: D ep end ent equ at ion s
- C.: C.
- C.: i n con sis t ent equ at ions
- D.: D.
- D.: cann ot say
- D.: 3.
- D.: So lut ion fort he equ ati ons
- D.: $\frac{3}{4}$
- D.: u
- D.: x
- D.: +
- D.: $\frac{3}{4}$
- D.: w
- D.: y

- D.: = 0 and

- D.: $\frac{3}{4}$

- D.: y

- D.: x

- D.: +

- D.: $\frac{3}{4}$

- D.: s s

- D.: y

- D.: = 0

- D.: is (

- D.:)

- A.: A.

- A.: x

- A.: = 3,

- A.: y

- A.: = 5

- B.: B.

- B.: x

- B.: = 7,

- B.: y

- B.: = 11

- C.: C.

- C.: x

- C.: = 1,

- C.: y

- C.: = 1

- D.: D.

- D.: x

- D.: = 0,

- D.: y

- D.: = 0

- D.: 4.

- D.: The value

- D.: of

- D.: x

- D.: which satisfies the equation 3

- D.: x

- D.: (

- D.: x

- D.: 4) =3

- D.: x

- D.: +1 is (

- D.:)

- A.: A.

- A.: 3

- B.: B.

- B.: 0

- C.: C.

- C.: 3
- D.: D.
- D.: 10
- D.: 5.
- D.: Which of the following is inconsistent equation
- D.: to 2
- D.: x
- D.: + 3
- D.: y
- D.: $5 = 0$? (
- D.:)
- A.: A.
- A.: 4
- A.: x
- A.: 6
- A.: y
- A.: $11 = 0$
- B.: B.
- B.: 2
- B.: x
- B.: +
- B.: y
- B.: = 5
- C.: C.

- C.: x

- C.: $+3$

- C.: y

- C.: $=5$

- D.: D.

- D.: 4

- D.: x

- D.: $+6$

- D.: y

- D.: $11=0$

- D.: $6.$

- D.: x

- D.: which satisfies $2($

- D.: x

- D.: $1)$

- D.: $(1$

- D.: x

- D.: $)=2$

- D.: x

- D.: $+3 ($

- D.: $)$

- A.: A.

- A.: 2

- B.: B.

- B.: 4
- C.: C.
- C.: 6
- D.: D.
- D.: 8
- D.: 7.
- D.: The value of
- D.: k
- D.: for which
- D.: the system of equations
- D.: kx
- D.: y
- D.: = 2 and 6
- D.: x
- D.: 2
- D.: y
- D.: = 3
- D.: has no solution ,
- D.: is ... (
- D.:)
- A.: A.
- A.: = 3
- B.: B.
- C.: C.

- D.: D.

- D.: = 0

- D.: 8.

- D.: If 2

- D.: x

- D.: +3

- D.: y

- D.: = 8 and 4

- D.: x

- D.: +

- D.: py

- D.: = 16 has infinite solutions then

- D.: p

- D.: = (

- D.:)

- A.: A.

- A.: 8

- B.: B.

- B.: 6

- C.: C.

- C.: 10

- D.: D.

- D.: 16

- D.: 9.

- D.: The number of solutions of the pair of linear equations 3
- D.: x
- D.: + 2
- D.: y
- D.: = 6 and 6
- D.: x
- D.: + 4
- D.: y
- D.: = 18 is
- D.: (
- D.: May 22
- D.:)

- A.: A.

- A.: 0

- B.: B.

- B.: 1

- C.: C.

- C.: 2

- D.: D.

- D.: Infinite

- D.: 10.

- D.: The total cost of 2 pens and 3 books is Rs. 110. Linear

- D.: equation representing this

- D.: data is

- A.: A.

- A.: x

- A.: +

- A.: y

- A.: =

- A.: 10 0

- B.: B.

- B.: 5

- B.: x

- B.: = 110

- C.: C.

- C.: x

- C.: 2

- C.: +

- C.: y

- C.: 3

- C.: =1 10

- D.: D.

- D.: 2

- D.: x

- D.: + 3

- D.: y

- D.: = 11 0

- D.: (

- D.:)
- D.: .
- P A I R O F L I N E A R E Q U A T I O N S: P A I R O F L I N E A R E Q U A T I O N S
- P A I R O F L I N E A R E Q U A T I O N S: (
- P A I R O F L I N E A R E Q U A T I O N S: May 22
- P A I R O F L I N E A R E Q U A T I O N S:)
- P A I R O F L I N E A R E Q U A T I O N S: M a r c h 201 5 to
- P A I R O F L I N E A R E Q U A T I O N S: r t
- P A I R O F L I N E A R E Q U A T I O N S: 4
- P A I R O F L I N E A R E Q U A T I O N S: t
- J: J
- U N E: U N E
- U N E: i t r t
- U N E: 4
- U N E: 11.
- U N E: I f
- U N E: 3
- U N E: x
- U N E: +2
- U N E: y
- U N E: = 6,9
- U N E: x
- U N E: +
- U N E: k y

- UN E: = 7

- UN E: represent to in consistent equations, then the value of

- UN E: k

- UN E: is

- UN E: (

- UN E: May 22

- UN E:)

- A.: A.

- A.: 5

- B.: B.

- B.: 6

- C.: C.

- C.: 8

- D.: D.

- D.: 7

- D.: 12.

- D.: The total cost of 4 pencils and 5 notebooks is Rs .18 0 .The linear equation representing this data

- D.: is

- D.: (

- D.: Aug 22

- D.:)

- A.: A.

- A.: x

- A.: +

- A.: y

- A.: = 180

- B.: B.

- B.: 4

- B.: x

- B.: + 5

- B.: y

- B.: = 18 0

- C.: C.

- C.: 9

- C.: x

- C.: +

- C.: y

- C.: = 180

- D.: D.

- D.: 4

- D.: x

- D.: + 5

- D.: y

- D.: = 20

- D.: 13.

- D.: T he pai ro f equ at ion s 9

- D.: x

- D.: + 3

- D.: y

- D.: $+12 = 0$ and 18

- D.: x

- D.: +6

- D.: y

- D.: $+26 = 0$ has

- D.: (

- D.:)

- A.: A.

- A.: unique solution .

- B.: B.

- B.: two solutions .

- C.: C.

- C.: infinitely many

- C.: solutions ,

- D.: D.

- D.: no solution .

- D.: 14.

- D.: Which of the following is not a linear equation in two variables? (

- D.:)

- A.: A.

- A.: $5 + 4$

- A.: x

- A.: =

- A.: y

- A.: + 3

- B.: B.

- B.: x

- B.: + 2

- B.: y

- B.: =

- B.: y

- B.: x

- C.: C.

- C.: x

- C.: +

- C.: y

- C.: = 0

- D.: D.

- D.: 3

- D.: x

- D.: =

- D.: y

- D.: 2

- D.: + 4

- D.: 15.

- D.: T he firs t

- D.: -

- D.: degree equation in two variables

- D.: ax

- D.: $+$

- D.: by

- D.: $+$

- D.: c

- D.: $= 0$ represents

- A.: A.

- A.: Straight line

- B.: B.

- B.: Parabola

- C.: C.

- C.: Lines segment

- D.: D.

- D.: Ray

- D.: 16.

- D.: The value of

- D.: k

- D.: for which the pair of linear equations 2

- D.: x

- D.: $+ 3$

- D.: y

- D.: $= 7$ and 4

- D.: x

- D.: +

- D.: ky

- D.: =11 has n o

- D.: s olu ti on is ____ _

- A.: A.

- A.: 8

- B.: B.

- B.: 6

- C.: C.

- C.: 18

- D.: D.

- D.: 6

- QUAD RATI C EQUATI ONS: QUAD RATI C EQUATI ONS

- UN E: 1.

- UN E: If the su m of th e areas of two squ ares is 468

- UN E: m

- UN E: 2

- UN E: an d t he di fferen ce of th ei r perimeters is 24

- UN E: m

- UN E: .,

- UN E: t h en fi nd th e measu rement s o f th ei r sid es .(

- UN E:)

- UN E: 2.

- UN E: Su m o f th e squ ares of two co ns ecu tiv e pos it iv e ev en in teg ers i s 10 0; find th o s en umbers by

- UN E: u sin g q uad rati c eq uati ons .(
- UN E:)
- UN E: 3.
- UN E: T he pe ri met ero f a
- UN E: rig ht
- UN E: -
- UN E: ang l et ri angl e is 60 cm
- UN E: an d i ts hyp ot enu s ei s 25 cm. Th en fin d t he
- UN E: remaini ng two si des . (
- UN E:)
- UN E: 4.
- UN E: If
- UN E: 4
- UN E: i s aco mmon roo t fo r th eq uad rati c eq uati ons 2
- UN E: x
- UN E: 2
- UN E: +
- UN E: px
- UN E: + 8= 0 and
- UN E: p
- UN E: (
- UN E: x
- UN E: 2
- UN E: +

- UN E: x
- UN E:) +
- UN E: k
- UN E: = 0 (
- UN E:)
- UN E: 5.
- UN E: Su mo f sq uares oft wo cons ecu tiv e even
- UN E: nu mb ers is 58 0 .Fin d t he numbers b y w ri tin g as ui tabl e
- UN E: q uad rati c eq uati on . (
- UN E:)
- UN E: 6.
- UN E: If an umber wh en in creas ed b y 1 2 ,equ als 1 60 ti mes o f it s reci pro cal ,th en fin d th e nu mb ers .
- UN E: 7.
- UN E: Su mo f th e areas o f tw o s qu ares i s 8 50 m
- UN E: 2
- UN E: . lft h ed ifferen ce o f th eir peri met ers is 4 0 m.
- UN E: Fi nd
- UN E: the
- UN E: s id es of th e two sq uares .(
- UN E:)
- UN E: 8.
- UN E: Su mo f th e present ages oft w o fri end s are 23 y ears ,fiv ey ears ag o p ro du ct oft hei r ages was 4 2 .
- UN E: Fi nd th ei r ag es 5y ears hen ce.(

- UN E:)

- UN E: 9.

- UN E: In arigh t

- UN E: -

- UN E: angl e

- UN E: t ri an gl e, th e hyp ot enu s ei s 1 0 cm more th an th es ho rt est sid e. If thi rd s id e is 6

- UN E: cm les s t han t he hy pot enus e, find th e sid es o f th e ri ght

- UN E: -

- UN E: an gl e tri an gl e.(

- UN E:)

- UN E: 10.

- UN E: I n arigh t

- UN E: -

- UN E: ang letr iang le, leng th of th ehy po ten useis 6 cm mo r eth an its sho r test sid e. Th e leng th of

- UN E: th eo th er sid eis 3 cm less th an th eh ypo tenu se, th enf ind th esid esof righ t

- UN E: -

- UN E: ang letr ian g le.

- UN E: (

- UN E:)

- UN E: 11.

- A: A

- A: t rain trav els 36 0

- A: km

- A: . at au ni fo rm sp eed .

- A: If the speed had been 5

- A: km

- A: . /

- A: h

- A: more, it would have

- A: taken 1 hour less for the same journey. Find the speed of the train .

- A: (

- A:)

- A: 12.

- A: The numerator of a fraction is 3 less than its denominator. If 2 is added to both numerator and

- A: denominator, the sum of the new fraction formed and

- A: original fraction is

- A: 6 =

- A: 6 4

- A: then find the

- A: original fraction . (

- A:)

- A: Part

- A: -

- A: b

- A: 1.

- A: Which of the following is a quadratic equation? (

- A:)

- A.: A.

- A.: x
- A.: 3
- A.: 6
- A.: x
- A.: 2
- A.: +2
- A.: x
- A.: 1 =0
- B.: B.
- B.: x
- B.: 2
- B.: +
- B.: 5
- B.: ë
- B.: .
- B.: = 2
- C.: C.
- C.: x
- C.: +
- C.: 5
- C.: ë
- C.: = 3
- D.: D.
- D.: (

- D.: x

- D.: + 1) (

- D.: x

- D.: +

- D.: 2) (

- D.: x

- D.: +3)= 0

- D.: 2.

- D.: If

- D.: x

- D.: 2

- D.: p

- D.: x

- D.: + q =0 (p ,q

- D.: D

- D.: (

- D.:)

- A.: A.

- A.: p

- A.: 2

- A.: <4 q

- B.: B.

- B.: p

- B.: 2

- B.: >

- B.: $4q$

- C.: C.

- C.: p

- C.: 2

- C.: $= 4q$

- D.: D.

- D.: p

- D.: 2

- D.: $+ 4q = 0$

- D.: (

- J: J

- J: 8

- J:)

- Q UADR AT IC EQ U AT IO N S: Q UADR AT IC EQ U AT IO N S

- Q UADR AT IC EQ U AT IO N S: $t \{$

- Q UADR AT IC EQ U AT IO N S: 3.

- Q UADR AT IC EQ U AT IO N S: Wh i ch on eo f th e fol lo win g q uad rati c eq uat io ns h as equ al roo ts ? (

- Q UADR AT IC EQ U AT IO N S:)

- A.: A.

- A.: x

- A.: 2

- A.: $5 = 0$

- B.: B.

- B.: x

- B.: 2

- B.: 10

- B.: x

- B.: $+ 25 = 0$

- C.: C.

- C.: x

- C.: 2

- C.: $+ 5$

- C.: x

- C.: $+ 6 = 0$

- D.: D.

- D.: x

- D.: 2

- D.: 1

- D.: 4.

- D.: In a quadratic equation

- D.: ax

- D.: 2

- D.: $+$

- D.: bx

- D.: $+$

- D.: c

- D.: $= 0$, if

- D.: b
- D.: 2
- D.: -
- D.: 4
- D.: ac
- D.: >
- D.: 0 ,th en
- D.: th eir roots are....(
- D.:)
- A.: A.
- A.: real and di st in ct
- B.: B.
- B.: real and equ al
- C.: C.
- C.: i mag in ary
- D.: D.
- D.: N on e
- D.: 5.
- D.: If an umber is 132 smal ler th an it s s qu are,th en th e nu mb eri s (
- D.:)
- A.: A.
- A.: 11
- B.: B.
- B.: 8

- C.: C.

- C.: 9

- D.: D.

- D.: 12

- D.: 6.

- D.: If both roots are common to the quadratic equations

- D.: x

- D.: 2

- D.: $4 = 0$ and

- D.: x

- D.: 2

- D.: +

- D.: px

- D.: $4 = 0$,

- D.: then $p = \dots$

- D.: (

- D.:)

- A.: A.

- A.: 2

- B.: B.

- B.: 0

- C.: C.

- C.: 4

- D.: D.

- D.: 1

- D.: 7.

- D.: T he

- D.: su m of th e ro ot s

- D.: o f 6

- D.: x

- D.: 2

- D.: = 1

- D.: i s(

- D.:)

- A.: A.

- A.: 0

- B.: B.

- Ú: Ú

- Ú: ß

- C.: C.

- F: F

- Ú: Ú

- Ú: ß

- D.: D.

- D.: 6

- D.: 8.

- D.: T he su m of anu mb er and i ts

- D.: recip rocal i s

- D.: 5 ;

- D.: 8

- D.: ,t h e n t h e n u m b e r i s (

- D.:)

- A.: A.

- A.: 3

- B.: B.

- B.: 4

- C.: C.

- C.: 5

- D.: D.

- D.: 17

- D.: 9.

- D.: T h e r o o t s o f a q u a d r a t i c e q u a t i o n

- D.: ax

- D.: 2

- D.: +

- D.: bx

- D.: +

- D.: c

- D.: $= 0,$

- D.: a

- D.:)

- A.: A.

- A.: ?

- Õ: Õ

- Õ: >

- Õ: ¥

- Õ: Õ

- Õ: .

- Õ: ?

- Õ: 8

- Ô Ö: Ô Ö

- Ô Ö: 6

- Ô: Ô

- Ô: ;

- Ô: ?

- Õ: Õ

- Õ: >

- Õ: ¥

- Õ: Õ

- Õ: .

- Õ: >

- Õ: 8

- Ô Ö: Ô Ö

- Ô Ö: 6

- Ô: Ô

- B.: B.

- B.: ?

- Õ: Õ

- Õ: >

- Õ: ¥

- Õ: Õ

- Õ: .

- Õ: ?

- Õ: 8

- Ô Ö: Ô Ö

- Ô Ö: 6

- Ô: Ô

- Ô: ;

- Ô: ?

- Õ: Õ

- Õ: ?

- Õ: ¥

- Õ: Õ

- Õ: .

- Õ: >

- Õ: 8

- Ô Ö: Ô Ö

- Ô Ö: 6

- Ô: Ô

- C.: C.

- Õ: Õ

- Õ: >

- Õ: ¥

- Õ: Õ

- Õ: .

- Õ: ?

- Õ: 8

- Ô Ö: Ô Ö

- Ô Ö: 6

- Ô: Ô

- Ô: ;

- Õ: Õ

- Õ: ?

- Õ: ¥

- Õ: Õ

- Õ: .

- Õ: ?

- Õ: 8

- Ô Ö: Ô Ö

- Ô Ö: 6

- Ô: Ô

- D.: D.

- D.: ?

- Õ: Õ

- \tilde{O} : >

- \tilde{O} : \neq

- \tilde{O} : \tilde{O}

- \tilde{O} : .

- \tilde{O} : ?

- \tilde{O} : 8

- \hat{O} \ddot{O} : \hat{O} \ddot{O}

- \hat{O} \ddot{O} : 6

- \hat{O} : \hat{O}

- \hat{O} : ;

- \hat{O} : ?

- \tilde{O} : \tilde{O}

- \tilde{O} : ?

- \tilde{O} : \neq

- \tilde{O} : \tilde{O}

- \tilde{O} : .

- \tilde{O} : ?

- \tilde{O} : 8

- \hat{O} \ddot{O} : \hat{O} \ddot{O}

- \hat{O} \ddot{O} : 6

- \hat{O} : \hat{O}

- \hat{O} : 10.

- \hat{O} : If one root of the quadratic equation

- \hat{O} : x

- Ô: 2

- Ô: kx

- Ô: k

- Ô: (

- Ô: Ma y 22

- Ô:)

- A.: A.

- A.: 12

- B.: B.

- B.: 17

- C.: C.

- C.: 18

- D.: D.

- D.: 13

- D.: 11.

- D.: The sum of the roots of the quadratic equation 2

- D.: x

- D.: 2

- D.: + 6

- D.: x

- D.: $+4 = 0$ is

- D.: (

- D.: A ug .2 2

- D.:)

- A.: A.
- A.: 3
- B.: B.
- B.: 3
- C.: C.
- C.: 2
- D.: D.
- D.: 2
- D.: 12.
- D.: The nature of roots of the Quadratic Equation
- D.: x
- D.: 2
- D.: + 6
- D.: x
- D.: $+ 9 = 0$ is
- D.: (
- D.: May 20 22
- D.:)
- A.: A.
- A.: Real and distinct
- B.: B.
- B.: Real and equal
- C.: C.
- C.: No real roots

- D.: D.

- D.: One is positive and the other is negative

- D.: 13.

- D.: If the quadratic equation

- D.: x

- D.: 2

- D.: +

- D.: kx

- D.: $+9=0$ has equal roots, then the value of 'k' is . (

- D.:)

- A.: A.

- A.: 3

- B.: B.

- B.: 3

- C.: C.

- C.: 6

- D.: D.

- D.: 9

- D.: 14.

- D.: The nature of roots of the Quadratic Equation

- D.: x

- D.: 2

- D.: + 10

- D.: x

- D.: $+24 = 0$ is
- D.: (
- D.: Aug. 22
- D.:)
- A.: A.
- A.: Real and distinct
- B.: B.
- B.: Real and equal
- C.: C.
- C.: No real roots
- D.: D.
- D.: One is positive and
- D.: other is negative
- D.: 15.
- D.: The product of two consecutive positive integers is 30
- D.: .
- D.: This can be expressed algebraically as
- A.: A.
- A.: x
- A.: (
- A.: x
- A.: $+ 2) = 30$
- B.: B.
- B.: x

- B.: (

- B.: x

- B.: 2) =30

- C.: C.

- C.: x

- C.: (

- C.: x

- C.: 3) =30

- D.: D.

- D.: x

- D.: (

- D.: x

- D.: + 1) =3 0

- D.: 16.

- D.: T he qu ad rat i c equ at ion wi th ro ots 2 +

- D.: $\frac{3}{4}$

- D.: u

- D.: an d 2

- D.: $\frac{3}{4}$

- D.: u

- D.: i s

- D.: (

- D.:)

- A.: A.

- A.: x

- A.: 2

- A.: + 4

- A.: x

- A.: +1 =0

- B.: B.

- B.: x

- B.: 2

- B.: + 4

- B.: x

- B.: 1 =0

- C.: C.

- C.: x

- C.: 2

- C.: 4

- C.: x

- C.: + 1 =0

- D.: D.

- D.: x

- D.: 2

- D.: 4

- D.: x

- D.: 1 =0

- D.: (

- D.:)
- Q UADR AT IC EQ U AT IO N S: Q UADR AT IC EQ U AT IO N S
- Q UADR AT IC EQ U AT IO N S: M arch 201 5 to
- Q UADR AT IC EQ U AT IO N S: r t
- Q UADR AT IC EQ U AT IO N S: 4
- Q UADR AT IC EQ U AT IO N S: t
- JUN E: JUN E
- JUN E: ĩ t r t
- JUN E: 4
- JUN E: 17.
- JUN E: T he qu ad rat i c equ at ion havi ng th e roo ts 2 an d
- JUN E: 2 i s(
- JUN E:)
- A.: A.
- A.: x
- A.: $x^2 + 4$
- A.: x
- A.: $4 = 0$
- B.: B.
- B.: x
- B.: 2
- B.: 2
- B.: x
- B.: $4 = 0$

- C.: C.

- C.: x

- C.: 2

- C.: + 2

- C.: x

- C.: $4 = 0$

- D.: D.

- D.: x

- D.: 2

- D.: $4 = 0$

- D.: 18.

- D.: The Quadratic equation, whose sum of the roots is

- D.: 3 and product of the roots is 2.

- A.: A.

- A.: x

- A.: 2

- A.: +

- A.: 6

- A.: x

- A.: +

- A.: 5

- A.: $= 0$

- B.: B.

- B.: x

- B.: 2

- B.: x

- B.: 6

- B.: =0

- C.: C.

- C.: x

- C.: 2

- C.: 3

- C.: x

- C.: +

- C.: 2

- C.: =0

- D.: D.

- D.: x

- D.: 2

- D.: +

- D.: 3

- D.: x

- D.: +

- D.: 2

- D.: = 0

- D.: 19.

- D.: The roots of a Quadratic equation 2

- D.: x

- D.: 2

- D.: +

- D.: x

- D.: $+4 = 0$ are ____

- A.: A.

- A.: One is positive and the other is negative.

- B.: B.

- B.: Both are positive.

- C.: C.

- C.: Both are negative.

- D.: D.

- D.: No Real roots

- D.: 20.

- A.: A.

- A.: x

- A.: 2

- A.: 4

- A.: x

- A.: +

- A.: 5

- A.: = 0

- B.: B.

- B.: x

- B.: 2

- B.: +

- B.: 3

- B.: x

- B.: 12

- B.: = 0

- C.: C.

- C.: 2

- C.: x

- C.: 2

- C.: 7

- C.: x

- C.: +

- C.: 6

- C.: = 0

- D.: D.

- D.: 3

- D.: x

- D.: 2

- D.: 6

- D.: x

- D.: 2

- D.: =0

- D.: 21.

- D.: If

- D.: x

- D.: +

- D.: 5

- D.: ë

- D.: = 2 th en

- D.: x

- D.: 2

- D.: +

- D.: 5

- D.: ë

- D.: .

- D.: = _____

- A.: A.

- A.: 4

- B.: B.

- B.: 6

- C.: C.

- C.: 2

- D.: D.

- D.: 1

- PROG RESS IONS: PROG RESS IONS

- F: 1.

- F: If the

- F: n

- F: the terms of the Geometric Progressions 162, 54, 18, and

- F: 6

- F: < 5

- F: a

- F: 6

- F: 6 ;

- F: a

- F: 6

- F: =

- F: a

- F:

- F: are

- F: equal, then find the value of

- F: n

- F: (

- F:)

- F: 2.

- F: If the sum of the first 7 terms of an Arithmetic Progression is 49 and that of first 17 terms is

- F: n

- F:)

- F: 3.

- F: A manufacturer of TV sets produced 500 sets in the third year and 700 sets in the seventh year.

- F: Assuming that the production increases uniformly by a fixed number every year. Find

- F: i) the production of TV sets in the 15th year
- F: ii) the total production of TV sets in the first 10 years. (
- F:)
- F: 4.
- F: Find the sum of all the three
- F: digit numbers as , which are divisible by 4. (
- F:).
- F: 5.
- F: The sum of the three
- F: terms which
- F: are in an arithmetic progression is 33. if the product of the
- F: first and the third terms exceeds the second term by 29, find the Arithmetic Progression. (
- F:)
- F: 6.
- F: Find the sum of all
- F: three
- F: -
- F: digit
- F: natural numbers, which are divisible by 3 and not divisible by 6. (
- F:)
- F: 7.
- F: The sum of 5
- F: th
- F: and 9

- F: th

- F: terms of A.P. is 72 and the sum of 7

- F: th

- F: and 12

- F: th

- F: terms is 97. Find the A.P.

- F: 8.

- F: Which term of G.P.: 3, 9, 27, is

- F: 2187?

- F: (

- F:)

- F: 9.

- F: Find the sum of all

- F: two

- F: -

- F: digit

- F: odd positive integers which are divisible by 3 but not by 2. (

- F:)

- F: 10.

- F: Find the sum of the integers between 100 and 500 that are divisible by 9. (

- F:)

- F: (

- F:)

- F: (

- J: J

- J: 7

- J:)

- P RO G RESS IO NS: P RO G RESS IO NS

- P RO G RESS IO NS: M arch 201 5 to

- P RO G RESS IO NS: r t

- P RO G RESS IO NS: 4

- P RO G RESS IO NS: t

- JUN E: JUN E

- JUN E: i t r t

- JUN E: 4

- JUN E: 11.

- JUN E: Fi nd th es um of al l

- JUN E: tw o

- JUN E: -

- JUN E: di git

- JUN E: od d mul tip l es of 3 .(

- JUN E:)

- JUN E: 12.

- JUN E: Fi nd th e

- JUN E: s um of al l int eger s t he betw een 1 to 50 whi ch are not div is ibl e by 3 .

- JUN E: (

- JUN E:)

- JUN E: Part

- JUN E: -

- JUN E: b

- JUN E: 1.

- JUN E: T he common d i fference o f an Arit hmeti c Pro gressi on ,who s e3 rd

- JUN E: t erm is 5 and 7t h t erm is

- JUN E: 9 ,is

- JUN E: (

- JUN E:)

- A.: A.

- A.: 1

- B.: B.

- B.: 2

- C.: C.

- C.: 3

- D.: D.

- D.: 4

- D.: 2.

- D.: If (i)

- D.: 1 .0 ,

- D.: 1 .5 ,

- D.: 2 .0 ,

- D.: 1 ,

- D.: 3 ,

- D.: 9 ,

- D.: 2 7 ,....are t w o p r o g r e s s i o n s ,
- D.: t h e n w h i c h o f t h e m i s a G e o m e t r i c P r o g r e s s i o n (
- D.:)
- A.: A.
- A.: (i) o n l y
- B.: B.
- B.: (i i) o n l y
- C.: C.
- C.: (i) a n d (i i) b o t h
- D.: D.
- D.: N o n e o f t h e m
- D.: 3.
- D.: I n G e o m e t r i c
- D.: P r o g r e s s i o n f o r m u l a
- D.: t
- D.: n
- D.: =
- D.: a r
- D.: n
- D.: -
- D.: 1
- D.: ,
- D.: r
- D.: d e n o t e s (

- D.: ,
- D.:)
- A.: A.
- A.: n
- A.: th
- A.: t erm
- B.: B.
- B.: N umber of t erms .
- C.: C.
- C.: Co mmon ratio
- D.: D.
- D.: Fi rst term
- D.: 4.
- D.: Wh i ch of
- D.: th e fo ll owin g
- D.: g eo met ric prog ress ion s h as t he common ratio as
- D.: $\frac{3}{4}$
- \hat{U} : \hat{U}
- \hat{U} : (
- \hat{U} :)
- A.: A.
- A.: $\frac{3}{4}$
- A.: t
- A.: ,

- A.: $\frac{3}{4}$

- A.: x

- A.: ,

- A.: $\frac{3}{4}$

- A.: s z

- B.: B.

- B.: $\frac{3}{4}$

- B.: u

- B.: ,

- B.: $\frac{3}{4}$

- B.: x

- B.: ,

- B.: $\frac{3}{4}$

- B.: s t

- C.: C.

- C.: $\frac{3}{4}$

- C.: w

- C.: ,

- C.: $\frac{3}{4}$

- C.: s w

- C.: ,

- C.: $\frac{3}{4}$

- C.: v w

- D.: D.

- D.: $\frac{3}{4}$

- D.: y

- D.: ,

- D.: $\frac{3}{4}$

- D.: t s

- D.: ,

- D.: $\frac{3}{4}$

- D.: x u

- D.: 5.

- D.: The common difference of an Arithmetic Progression in which

- D.: a

- D.: 25

- D.: a

- D.: 12

- D.: =

- D.: 52 is . (

- D.:)

- A.: A.

- A.: 4

- B.: B.

- B.: 4

- C.: C.

- C.: 3

- D.: D.

- D.: 3

- D.: 6.

- D.: Sum of 10 terms of the progression

- D.: $\log 2 + \log 4 + \log 8 + \log 16 + \dots$ is ... (

- D.:)

- A.: A.

- A.: $45 \log 2$

- B.: B.

- B.: $90 \log 2$

- C.: C.

- C.: $10 \log 2$

- D.: D.

- D.: $55 \log 2$

- D.: 7.

- D.: Which term of the arithmetic progression 24, 21, 18, ... is the first negative term?

- D.: (

- D.:)

- A.: A.

- A.: 8

- A.: th

- B.: B.

- B.: 9

- B.: th

- C.: C.

- C.: 10

- C.: th

- D.: D.

- D.: 12

- D.: th

- D.: 8.

- D.: The sum of first 100 natural numbers is (

- D.:)

- A.: A.

- A.: 4 050

- B.: B.

- B.: 4 500

- C.: C.

- C.: 5 500

- D.: D.

- D.: 5 050

- D.: 9.

- D.: a

- D.: ,

- D.: b

- D.: ,

- D.: c

- D.: are in G.P., then

- D.: b

- D.: = (

- D.:)

- A.: A.

- Ô: Ô

- Ô: >

- Ö: Ö

- Ö: 6

- B.: B.

- B.: ac

- C.: C.

- C.: $\frac{3}{4}$

- C.: = ?

- D.: D.

- D.: a

- D.: 2

- D.: c

- D.: 2

- D.: 10.

- D.: If

- F: F

- F: t

- F: y

- F: ,

- F: x

- F: ,

- F: F

- F: y

- F: t

- F: are i n G eomet ri c Pro gressi on then th ev alu eo f

- F: x

- F: is (

- F:)

- A.: A.

- A.: 2

- B.: B.

- B.: 1

- C.: C.

- C.: 0

- D.: D.

- D.: 14

- D.: 11.

- D.: In an arith met i cp ro g res sio n ,4

- D.: th

- D.: t ermi s 1 1 and 7t h t ermi s 1 7 ,t hen it s co mmon di fferen ce

- D.: i s

- D.: (

- D.:)

- A.: A.

- A.: 1
- B.: B.
- B.: 2
- C.: C.
- C.: 3
- D.: D.
- D.: 4
- D.: 12.
- D.: Sum of the first 10 natural numbers is (
- D.: & May 20 22
- D.:)
- A.: A.
- A.: 5 4
- A.: \
- A.: =
- A.: 6
- B.: B.
- B.: 5 4
- B.: \
- B.: 5 4
- B.: 6
- C.: C.
- C.: 5 4
- C.: \

- C.: 5 5

- C.: 6

- D.: D.

- D.: Both A and B.

- D.: 13.

- D.: If the common difference of A.P. is 2, then

- D.: a

- D.: 10

- D.: a

- D.: 5

- D.: =(

- D.:)

- A.: A.

- A.: 5

- B.: B.

- B.: 10

- C.: C.

- C.: 2

- D.: D.

- D.: 20

- D.: 14.

- D.: In a G.P., the 5

- D.: th

- D.: term is 3 2 and 7

- D.: th

- D.: term is 128, then the common ratio of G.P. (

- D.:)

- A.: A.

- A.: 2

- B.: B.

- B.: 5

- C.: C.

- C.: 7

- D.: D.

- D.: 3

- D.: 15.

- D.: If a, b, c are in A.P. then $b = \dots$ (

- D.:)

- A.: A.

- A.: 0

- A.: >

- A.: 0

- A.: 6

- B.: B.

- B.: a

- B.: +

- B.: c

- C.: C.

- C.: $\frac{3}{4}$

- C.: = ?

- D.: D.

- D.: ac

- P R O G R E S S I O N S: P R O G R E S S I O N S

- P R O G R E S S I O N S: M arch 201 5 to

- P R O G R E S S I O N S: r t

- P R O G R E S S I O N S: 4

- P R O G R E S S I O N S: t

- U N E: U N E

- U N E: i t r t

- U N E: 4

- U N E: 16.

- U N E: T he su m of th e first 20 even n umbers i s _ _ _ _ (

- U N E:)

- A.: A.

- A.: 5 050

- B.: B.

- B.: 55

- C.: C.

- C.: 5 05

- D.: D.

- D.: 4 20

- D.: 17.

- D.: If the
- D.: n
- D.: th
- D.: t ermo f an ari th met ic prog res si on is $4n$
- D.: 2 ,th en it s 1 0
- D.: th
- D.: t ermi s . . .
- D.: (
- D.: Ma y 2022
- D.:)
- A.: A.
- A.: 38
- B.: B.
- B.: 28
- C.: C.
- C.: 42
- D.: D.
- D.: 24
- D.: 18.
- D.: If the su m of firs t
- D.: n
- D.: terms of an arit hmeti cp rog res sion is
- D.: á
- D.: .

- D.: >
- D.: á
- D.: 6
- D.: , then the sum of first 10 terms
- D.: is
- D.: (
- A: A
- A: ug
- A: .
- A: 22
- A:)
- A.: A.
- A.: 55
- B.: B.
- B.: 1 10
- C.: C.
- C.: 50
- D.: D.
- D.: 45
- D.: 19.
- D.: In an arithmetic progression
- D.: th
- D.: terms
- D.: a

- D.: n
- D.: =
- D.: a
- D.: + (
- D.: n
- D.: 1)
- D.: d
- D.: .In this formula
- D.: d
- D.: represents
- A.: A.
- A.: Number of terms
- B.: B.
- B.: n
- B.: th
- B.: term
- C.: C.
- C.: first term
- D.: D.
- D.: Common difference
- D.: 22.
- D.: The 30
- D.: th
- D.: term of the A.P. 10, 7, 4, is . . .

- D.: (
- D.:)
- A.: A.
- A.: 87
- B.: B.
- B.: 77
- C.: C.
- C.: 77
- D.: D.
- D.: 87
- D.: 23.
- D.: The 8
- D.: th
- D.: term of the geometric progression $512, 256, 128, \dots$ is ... (
- D.:)
- A.: A.
- A.: 64
- B.: B.
- B.: 8
- C.: C.
- C.: 16
- D.: D.
- D.: 4
- D.: 24.

- D.: The number of terms in the AP; 2, 5, 8, ..., 32 is ____

- A.: A.

- A.: 9

- B.: B.

- B.: 10

- C.: C.

- C.: 11

- D.: D.

- D.: 32

- D.: 25.

- D.: The 15th term of the AP; 3, 6, 9, ... is _____

- A.: A.

- A.: 15

- B.: B.

- B.: 45

- C.: C.

- C.: 30

- D.: D.

- D.: 360

- D.: 26.

- D.: Which term of the AP; 50, 40, 30, ... is zero?

- A.: A.

- A.: 6

- B.: B.

- B.: 5
- C.: C.
- C.: 1
- C.: 0
- D.: D.
- D.: 7
- COORDINATE GEOMETRY: COORDINATE GEOMETRY
- C(: 1.
- C(: Name the type of
- C(: quadrilateral formed by joining the points A(
- C(: 1 ,
- 2), B(1,0),C(: 2), B(1,0),C(
- 2), B(1,0),C(: 1 , 2) and
- D(: D(
- D(: 3 ,0)
- D(: on a graph paper. Justify your answer. (
- D(:)
- D(: 2.
- D(: If A (
- 5 ,7),B(: 5 ,7),B(
- 5 ,7),B(: 4 ,
- 5),C(: 5),C(
- 5),C(: 1 ,
- 5),C(: 6) and D (4 ,5)

- 5),C(: aret he verti ces of a qu ad ril at eral ,then find

- 5),C(: t h eareao f th eq u ad ril ateral ABCD . (

- 5),C(:)

- 5),C(: 3.

- 5),C(: Fi nd th e co

- 5),C(: -

- 5),C(: o rd in at es o f th ep oi nts tri section oft he li n es eg men t j oi nin g t he po int s (

- 5),C(: 3,3) and

- 5),C(: (3 ,

- 5),C(: 3) (

- 5),C(:)

- 5),C(: 4.

- 5),C(: If thepo int s P(

- 3 ,9),Q (: 3 ,9),Q (

- 3 ,9),Q (: a

- 3 ,9),Q (: ,

- 3 ,9),Q (: b

- 3 ,9),Q (:) and R(4 ,

- 3 ,9),Q (: 5) are col lin ear

- 3 ,9),Q (: an d

- 3 ,9),Q (: a

- 3 ,9),Q (: +

- 3 ,9),Q (: b

- 3 ,9),Q (: = 1, th en fi nd th ev alu es

- 3,9),Q (: o f

- 3,9),Q (: a

- 3,9),Q (: and

- 3,9),Q (: b

- 3,9),Q (: . (

- 3,9),Q (:)

- 3,9),Q (: 5.

- 3,9),Q (: T he po int s Cand Don th e lin e seg ment jo in ing A(

- 3,9),Q (: 4,7) an d B(5,13) Such t hat A C= CD =

- D B.: D B.

- D B.: Th en find th e co

- D B.: -

- D B.: o rd in at es o f p oin t Cand D. (

- D B.:)

- D B.: 6.

- D B.: T he area o f th et riangl e is 18 sq .uni ts ,whos e verti ces are(3,4),(

- D B.: 3 ,

- D B.: 2) and (

- D B.: p

- D B.: ,

- D B.: 1); th en

- D B.: p

- D B.:)

- D B.: 7.

- D B.: Find the points of trisection of the line segment joining the points (

- D B.: 2, 1) and (7, 4). (

- D B.:)

- D B.: 8.

- D B.: Show that the points A (

- D B.: 1,

- D B.: 2), B(4, 3), C(2, 5) and D (

- D B.: 3, 0) form a

- D B.: rectangle. (

- D B.:)

- D B.: 9.

- D B.: Find the ratio in which X

- D B.: axis divides the line segment joining the points (2,

- D B.: t

- D B.: 3) and (5, 6).

- D B.: Then find the intercept on X

- D B.: axis. (

- D B.:).

- D B.: 10.

- D B.: Find the area of the Rhombus ABCD,

- D B.: whose vertices are taken in order, are A

- D B.: (

- D B.: 1, 1),

- B(1, ; B(1,

- 2),C(3 ,1),D (1 ,4):. 2),C(3 ,1),D (1 ,4).

- 2),C(3 ,1),D (1 ,4):. (

- 2),C(3 ,1),D (1 ,4):.)

- 2),C(3 ,1),D (1 ,4):. .

- 2),C(3 ,1),D (1 ,4):. (

- 2),C(3 ,1),D (1 ,4):.)

- CO O RDINA TE G EO M ET RY: CO O RDINA TE G EO M ET RY

- CO O RDINA TE G EO M ET RY: M arch 201 5 to

- CO O RDINA TE G EO M ET RY: r t

- CO O RDINA TE G EO M ET RY: 4

- CO O RDINA TE G EO M ET RY: t

- JUN E: JUN E

- JUN E: ĩ t r t

- JUN E: 4

- JUN E: 11.

- JUN E: Sh ow t h at th ed ist ance of th ep oin ts (5,1 2),(7 ,2 4) and (3 5 ,1 2)fro mt h eo ri gin
arearrang ed

- JUN E: i n as cend ing ord er forms an arith met ic prog res si on .Find th e common di fference
o fth e

- JUN E: p rog ress ion .

- JUN E: (

- JUN E: Ma y 202 2

- JUN E:)

- JUN E: 12.

- JUN E: If A (

- 2,2) B(2,2) B(
- 2,2) B(a
- ,6) C(4 ,: ,6) C(4 ,
- ,6) C(4 ,: b
- ,6) C(4 ,:) and D(2 ,
- ,6) C(4 ,: 2) are the vertices of a parallelogram ABCD , then find
- ,6) C(4 ,: the values of
- ,6) C(4 ,: a
- ,6) C(4 ,: and
- ,6) C(4 ,: b
- ,6) C(4 ,: . Also find the lengths of its sides .
- ,6) C(4 ,: 13.
- ,6) C(4 ,: Show that the quadrilateral formed by joining the points (
- ,6) C(4 ,: 4,2),(4,4),(2,12) and (
- ,6) C(4 ,: 6,10)
- ,6) C(4 ,: taken in order is a square.(
- ,6) C(4 ,:)
- ,6) C(4 ,: 14.
- ,6) C(4 ,: The three vertices of a parallelogram ABCD are A (
- ,6) C(4 ,: 1 ,
- 2),B (4 ,: 2),B (4 ,
- 2),B (4 ,: 1) and C(6,3) Find the
- 2),B (4 ,: coordinates of vertex D and find the area of parallelogram ABCD .
- 2),B (4 ,: 15.

- 2),B (4 ,: Find the coordinates of the points of the intersection of the line segment joining the points A (2 ,
- 2),B (4 ,: 2)
- 2),B (4 ,: and B(
- 2),B (4 ,: 7 ,4).
- 2),B (4 ,: Part
- 2),B (4 ,: -
- 2),B (4 ,: b
- 2),B (4 ,: 1.
- 2),B (4 ,: If a straight line passing through the points P(x
- 2),B (4 ,: 1
- 2),B (4 ,: , y
- 2),B (4 ,: 1
- 2),B (4 ,:),Q(x
- 2),B (4 ,: 2
- 2),B (4 ,: , y
- 2),B (4 ,: 2
- 2),B (4 ,:) is making an angle with
- 2),B (4 ,: positive X
- 2),B (4 ,: -
- 2),B (4 ,: axis ,then the slope of the straight line is
- 2),B (4 ,: (
- 2),B (4 ,:)
- A.: A.
- A.: i

- A.: .

- A.: >

- A.: ì

- A.: -

- A.: ë

- A.: .

- A.: >

- A.: ë

- A.: -

- B.: B.

- E: E

- C.: C.

- C.: ì

- C.: .

- C.: ?

- C.: ì

- C.: -

- C.: ë

- C.: .

- C.: ?

- C.: ë

- C.: -

- D.: D.

- D.: s in

- E: E
- E: 2.
- E: In aco
- E: o rd in at e pl ane,i f li n es eg men t A B is
- E: p aral l el to X
- E: ax is ,th en wh i ch o f th e
- E: fo llo win g i s co rrect .(
- E:)
- A.: A.
- A.: x
- A.: co
- A.: -
- A.: o rd in at es o fp oi nt s A and B
- A.: are equ al .
- B.: B.
- B.: y
- B.: co
- B.: -
- B.: o rd in at es o fp oi nt s A and B
- B.: are equ al .
- C.: C.
- C.: x
- C.: co
- C.: -

- C.: ordinate of point A and
- C.: y
- C.: co
- C.: -
- C.: ordinate point Bare equal .
- D.: D.
- D.: y
- D.: co
- D.: -
- D.: ordinate of point A and
- D.: x
- D.: co
- D.: -
- D.: ordinate point Bare equal .
- D.: 3.
- D.: The area of triangle whose vertices (points) are
- D.: (0,0
- D.:),(
- D.: 3,0) and (0,4) is ____ (
- D.:)
- A.: A.
- A.: 3
- A.: sq. units
- B.: B.

- B.: 4
- B.: sq .un it s
- C.: C.
- C.: 6
- C.: sq .un it s
- D.: D.
- D.: 5
- D.: 4.
- D.: Sl op eo f th el in e
- D.: p assi ng th ro ugh (
- D.: 1 ,
- D.: 1) and (1 ,1)i s
- D.: (
- D.:)
- A.: A.
- A.: 1
- B.: B.
- B.: 0
- C.: C.
- C.: 1
- D.: D.
- D.: N ot defin e
- D.: 5.
- D.: If theco

- D.: -

- D.: ordinates of the vertices of a rectangle are $(0, 0)$, $(4, 0)$, $(4, 3)$ and $(0, 3)$ then the

- D.: length of

- D.: its diagonal is (

- D.:)

- A.: A.

- A.: 4

- B.: B.

- B.: 5

- C.: C.

- C.: 7

- D.: D.

- D.: 3

- D.: 6.

- D.: Sum of the distances from $A(3, 4)$ to X

- D.: axis and from $B(5, 7)$ to Y

- D.: axis is . . (

- D.:)

- A.: A.

- A.: 8

- B.: B.

- B.: 10

- C.: C.

- C.: 11

- D.: D.
- D.: 9
- D.: 7.
- D.: (
- D.: x
- D.: ,
- D.: y
- D.:),(2,0),
- D.: (3,2) and (1,2) are vertices of a
- D.: parallelogram, then (
- D.: x
- D.: ,
- D.: y
- D.:) = ... (
- D.:)
- A.: A.
- A.: (0,1)
- B.: B.
- B.: (4,8)
- C.: C.
- C.: (1,0)
- D.: D.
- D.: (5,0)
- D.: 8.

- D.: The distance between two points A

- D.: (

- D.: a

- D.: cos

- E: E

- ,0),B: ,0),B

- ,0),B: (0 ,

- ,0),B: a

- ,0),B: sin

- E: E

- E:) is (

- E:)

- A.: A.

- A.: a

- B.: B.

- B.: a

- B.: 2

- C.: C.

- C.: $\frac{3}{4}$

- C.: =

- D.: D.

- D.: 0

- D.: 9.

- D.: If the slope of the line joining the points (2,5) and (

- D.: x

- D.: x

- D.: = ____ _

- D.: .

- D.: (

- M: M

- M: 22

- M:)

- A.: A.

- A.: 0

- B.: B.

- B.: 1

- C.: C.

- C.: -

- C.: 1

- D.: D.

- D.: 2

- D.: 10.

- D.: The area of the triangle BOA is

- D.: square units

- D.: . (

- D.:)

- A.: A.

- A.: 1

- B.: B.
- B.: 2
- C.: C.
- C.: 3
- D.: D.
- D.: 4
- A: A
- O: O
- B: B
- B: (0,0)
- B: (2,0)
- B: (0,3)
- CO O RDINA TE G EO M ET RY: CO O RDINA TE G EO M ET RY
- CO O RDINA TE G EO M ET RY: M arch 201 5 to
- CO O RDINA TE G EO M ET RY: r t
- CO O RDINA TE G EO M ET RY: 4
- CO O RDINA TE G EO M ET RY: t
- UN E: UN E
- UN E: ĩ t r t
- UN E: 4
- UN E: 11.
- UN E: Sl op eo f th el in ep assi ng
- UN E: th ro ugh th ep oi nts (4,6) and (2 ,
- UN E: 5)i s(

- UN E:)

- A.: A.

- A.: :

- A.: 9

- B.: B.

- F: F

- F: 6

- F: 8

- F: .

- C.: C.

- C.: 9

- C.: :

- D.: D.

- D.: 5 5

- D.: 6

- D.: 12.

- D.: then the angle between the line and X

- D.: -

- D.: axis is

- D.: . . . (

- J: J

- J:)

- A.: A.

- A.: 45

- A.: 0
- B.: B.
- B.: 30
- B.: 0
- C.: C.
- C.: 60
- C.: 0
- D.: D.
- D.: 90
- D.: 0
- D.: 13.
- D.: T he
- D.: di st an ce of th e po in t P(
- D.: x
- D.: ,
- D.: y
- D.:) fro m Y
- D.: ax is is(
- D.:)
- A.: A.
- A.:
- T: T
- T:
- B.: B.

- B.:
- U: U
- U:
- C.: C.
- C.:
- T: T
- E: E
- U: U
- U:
- D.: D.
- D.:
- T: T
- F: F
- U: U
- U:
- U: 14.
- U: If (
- U: a
- U: ,
- U: b
- U:),(
- U: b
- U: ,
- U: c

- U:) and (
- U: c
- U: ,
- U: a
- U:) are the vertices of a triangle and the centroid of triangle is origin .
- U: Then
- U: a
- U: 3
- U: +
- U: b
- U: 3
- U: +
- U: c
- U: 3
- U: = (
- U:)
- A.: A.
- A.: a
- A.: +
- A.: b
- A.: + c
- B.: B.
- B.: a bc
- C.: C.

- C.: 3

- C.: ab c

- D.: D.

- D.: 0

- D.: 15.

- D.: T he

- D.: d

- D.: i st an ceo f (3,4) fromo rig in i s (

- D.:)

- A.: A.

- A.: 3

- B.: B.

- B.: 4

- C.: C.

- C.: 5

- D.: D.

- D.: 7

- D.: 16.

- D.: T he po int (

- D.: 2 ,

- D.: 2)

- D.: i s in th e ____ ____ qu ad rant .(

- D.:)

- A.: A.

- Q: Q

- Q: 1

- B.: B.

- Q: Q

- Q: 2

- C.: C.

- Q: Q

- Q: 3

- D.: D.

- Q: Q

- Q: 4

- Q: 17.

- Q: The midpoint of the line segment joining the points $(3, 5)$, $($

- Q: x

- Q: $, 3)$ is $(4, 4)$, then the value of

- Q: x

- Q: is

- Q:

- Q: $($

- Q: $)$

- A.: A.

- A.: 3

- B.: B.

- B.: 4

- C.: C.

- C.: 5

- D.: D.

- D.: 7

- D.: 18.

- D.: The perimeter of a triangle with vertices $(0,4)$, $(0,0)$ and $(3,0)$ is

- D.: .

- D.: .

- D.: .

- D.: (

- D.:)

- A.: A.

- A.: y

- E.: E

- E.: $\frac{3}{4}$

- E.: w

- B.: B.

- B.: 5

- C.: C.

- C.: 12

- D.: D.

- D.: 11

- D.: 19.

- D.: Slope of the line passing through the points $(5,8)$ and $(6,10)$ is (

- D.:)

- A.: A.

- A.: 2

- B.: B.

- B.: 5

- B.: 6

- C.: C.

- C.: 7

- C.: 8

- D.: D.

- D.: 8

- D.: 7

- D.: 20.

- D.: The distance of the point

- D.: :

- D.: 6

- D.: z

- D.: á

- D.: 7

- D.: z s

- D.: ;

- D.: from the origin is (

- D.:)

- A.: A.

- A.: 32

- B.: B.

- B.: 4

- C.: C.

- C.: 5

- D.: D.

- D.: 2

- D.: 21.

- D.: The perimeter of a triangle, whose vertices are $(0, 5)$, $(0, 0)$ and $(12, 0)$ is ____

- A.: A.

- A.: 15

- B.: B.

- B.: 13

- C.: C.

- C.: 30

- D.: D.

- D.: 10

- D.: 22.

- D.: is

- D.: ____

- A.: A.

- A.: 5

- A.: 6

- B.: B.

- B.: $\frac{3}{4}$

- B.: t

- C.: C.

- C.: T an

- E: E

- D.: D.

- D.: 1

- CO O RDINA TE G EO M ET RY: CO O RDINA TE G EO M ET RY

- CO O RDINA TE G EO M ET RY: M arch 201 5 to

- CO O RDINA TE G EO M ET RY: r t

- CO O RDINA TE G EO M ET RY: 4

- CO O RDINA TE G EO M ET RY: t

- UN E: UN E

- UN E: ĩ t r t

- UN E: 4

- SIM ILAR TR IANG LES: SIM ILAR TR IANG LES

- N: 1.

- A: A

- A: med i cin e cap sul e is in th e sh ap eo f acy li nd erw ith tw o h emisph heres st u ck to each o f it s

- A: end s .lft h el en gth oft h ecyl ind rical p art of th e caps ul ei s 1 4

- A: mm

- A: and th e di amet er of

- A: h emi sph erei s 6

- A: mm

- A: ,th en fin d t he vo lu me of med icin e caps ul e. (
- A:)
- A: 2.
- A: T he area o f a secto r
- A: -
- A: sh ap ed canv as clot h i s 264
- A: m
- A: 2
- A: .Wit h t his canv as clo th ,i f arig ht circul ar
- A: con i cal t ent is erect ed with t he rad iu s o f th e base as 7
- A: m
- A: ,t hen fin d th e h ei gh t o f t h e t en t.(
- A:)
- A: 3.
- A: D WACRA i s su pp li ed cubo id al sh ap ed wax bl ock w ith meas urement s 8 8
- A: cm
- A: x 42
- A: cm
- A: x 35
- A: cm
- A: .
- A: fro m t hi s ho w many n umb er of cyl in dri cal cand l es of 2.8
- A: cm
- A: di amet er and 8

- A: cm

- A: of height can

- A: be prepared ? (

- A:)

- A: 4.

- A: How many spherical balls each 7

- A: cm

- A: in diameter can be made out of solid lead cube whose

- A: edge measures 66

- A: cm

- A: ? (

- A:)

- A: 5.

- A: The length of a cuboid is 12

- A: cm

- A: ,

- A: breadth and height are equal in measurements, and its

- A: volume is 432

- A: cm

- A: 3

- A: .The cuboid is cut into two cubes. Find the lateral surface area of each

- A: cube. (

- A:)

- A: 6.

- A: How many silver coins of diameter 5
- A: cm
- A: and thickness 4 mm have to be melted to prepare a
- A: cuboid of 12
- A: cm
- X: X
- X: 11
- X: cm
- X: X
- X: 5
- X: cm
- X: dimension? (
- X:)
- X: 7.
- X: A metallic sphere of diameter 30
- X: cm
- X: is melted and recast into a cylinder of radius 10
- X: cm
- X: . Find
- X: the height of the cylinder.
- X: (
- X:)
- X: 8.
- X: A toy is made with seven equal cubes of sides

- X: $\frac{3}{4}$

- X: y

- X: cm

- X: Six cubes are joined to six faces of a

- X: seventh cube. Find the total surface area of the toy. (

- X:)

- X: 9.

- X: A cylindrical tank of radius 7

- X: m

- X: has water to some level. If

- X: 110 cubes of the side of the side

- X: 7

- X: cm

- X: are completely measured in it, then find the rise in water level.

- X: (

- X:)

- X: 10.

- X: The sum of the radius of base and height of a solid right circular cylinder is 37 cm. If

- X: its

- X: total

- X: surface area is 1628

- X: cm

- X: 2

- X: , then find the volume of the cylinder

- X: @

- 7 O A: 7 O A

- 7 O A: è

- L: L

- L: 6 6

- L: ;

- A: A

- A: (

- M: M

- M: ay

- M:)

- M: 11.

- M: A metallic vessel is in the shape of a right circular cylinder mounted over a hemisphere. The

- M: common diameter is 42 cm and the height of the cylindrical part is 21 cm. Find the capacity of

- M: the vessel. (Take

- N: N

- N: =

- N: 6 6

- N: ;

- N:).

- N: (

- N: Aug

- N:)

- N: 12.

- N: Due to heavy floods in the state thousands were rendered homeless. The State Government

- N: decided to provide canvas for 1500 tents. The outer part of each tent is cylindrical of base radius

- N: 2.8 metres and height 3.5 metres with conical upper part of same base

- N: e radius but of height 2.1

- N: metres. If the canvas is used to make the tent costs Rs 100 per square metre, find the total cost of

- N: canvas to construct the tents.

- N: .

- N: 13.

- N: A solid toy is in the form of a right circular cylinder with a hemispherical shape at one end and a

- N: cone at the other end. The common diameter is 4.2 cm and the height of the cylindrical and

- MEN SURATION: MEN SURATION

- MEN SURATION: March 2015 to

- MEN SURATION: r t

- MEN SURATION: 4

- MEN SURATION: t

- JUNE: JUNE

- JUNE: i t r t

- JUNE: 4

- JUNE: conical portion are 12 cm and 7 cm respectively. Find the volume of the solid

- JUNE: toy.

- JUN E: @

- JUN E: è

- L: L

- L: 6 6

- L: ;

- A: A

- PART: PART

- PART: -

- B: B

- B: 1.

- B: Fo r ari gh t ci rcul ar con e wit h radi us =

- B: r

- B: ,h ei gh t =

- B: h

- B: an d s lant hei gh t =

- B: l

- B: ,w hi ch of th e

- B: fo llo win g i s n ot tru e?

- B: (

- B:)

- A.: A.

- A.: A lw ays

- A.: l

- A.: >

- A.: h
- B.: B.
- B.: Always
- B.: l
- B.: >
- B.: r
- C.: C.
- C.: Always
- C.: r
- C.: >
- N: N
- D.: D.
- D.: l
- D.: 2
- D.: =
- D.: r
- D.: 2
- D.: +
- D.: h
- D.: 2
- D.: 2.
- D.: Lateral surface area of right circular cone =
- N: N
- N: rl

- N: l
- N: (
- N: ,
- N: &
- N:)
- A.: A.
- A.: Height of the cone
- B.: B.
- B.: Diameter of the cone
- C.: C.
- C.: Slant height of the cone
- D.: D.
- D.: None of these
- D.: 3.
- D.: Let
- D.: r
- D.: ,
- D.: h
- D.: and
- D.: l
- D.: between
- D.: radius ,
- D.: height and slant height of a cone respectively , then express
- D.: l

- D.: in
- D.: t erms
- D.: o f r
- D.: and
- D.: h
- D.: (
- D.:)
- A.: A.
- A.: $\frac{3}{4}$
- D: D
- D: 6
- F: F
- N: N
- N: 6
- B.: B.
- B.: $\frac{3}{4}$
- N: N
- N: 6
- E: E
- D: D
- D: 6
- C.: C.
- C.: $\frac{3}{4}$
- N: N

- N: 6
- F: F
- D: D
- D: 6
- D.: D.
- D.: $\frac{3}{4}$
- D.: v
- N: N
- N: 6
- E: E
- D: D
- D: 6
- D: 4.
- D: V olu mes oft wo s ph eres are i n th e rat io of 8
- D: :
- D: 2 7 ,th e
- D: (
- D:)
- A.: A.
- A.: 2 :3
- B.: B.
- B.: 4 :3
- C.: C.
- C.: 2 :9

- D.: D.

- D.: 4 :9

- D.: 5.

- D.: a

- D.: (

- D.:)

- A.: A.

- A.: 5

- A.: 7

- A.:

- A.: a

- A.: 3

- B.: B.

- B.: 5

- B.: :

- B.:

- B.: a

- B.: 3

- C.: C.

- C.: 8

- C.: 7

- C.:

- C.: a

- C.: 3

- D.: D.

- D.: <

- D.: 7

- D.:

- D.: a

- D.: 3

- D.: 6.

- D.: The total surface area of a cube is 96 cm

- D.: 2

- D.: ,then side of cube is

- D.: (

- D.:)

- A.: A.

- A.: 3 cm

- B.: B.

- B.: 6 cm

- C.: C.

- C.: 4 cm

- D.: D.

- D.: 5 cm

- D.: 7.

- D.: Base area of prism is 36 cm² and its height is 10 cm then the volume of the prism is

- A.: A.

- A.: 300 cm

- A.: 3

- B.: B.

- B.: 3 00 cm

- B.: 2

- C.: C.

- C.: 1 50 cm

- C.: 2

- D.: D.

- D.: 1 50 cm

- D.: 3

- D.: 8.

- D.: T he vo lu meo f acon e with b as e rad ius 7 cm is 4 62 cc.,its heig ht is .

- D.: (

- D.:)

- A.: A.

- A.: 9 cm

- B.: B.

- B.: 1 8 cm

- C.: C.

- C.: 3 cm

- D.: D.

- D.: 2 7 cm

- D.: 9.

- D.: T he vo lu meo f acy lin der is gi ven b y th e fo rmu la

- D.: r

- D.: 2

- D.: h

- D.: ,

- D.: h

- D.: (

- D.:)

- A.: A.

- A.: diameter

- B.: B.

- B.: height

- C.: C.

- C.: radius

- D.: D.

- D.: slant height

- D.: 10.

- D.: A cylinder and a cone have equal radii and equal heights. If the volume of cylinder is 27

- D.: cu. Units, then the volume of cone is . . . (

- D.:)

- A.: A.

- A.: 27 c.u .

- B.: B.

- B.: 18 c.u .

- C.: C.

- C.: 9 c.u .

- D.: D.

- D.: 36 c.u .

- D.: 11.

- D.: Side of a cube and diameter of sphere are equal ,then the ratio of their volume will be

- D.: (

- D.:)

- A.: A.

- A.: 4 :

- N: N

- B.: B.

- B.: 6 :

- N: N

- C.: C.

- C.: 3 :

- N: N

- D.: D.

- D.: 2 :

- N: N

- N: 12.

- N: r

- N: cylinder of

- N: r

- N:)

- A.: A.

- A.: 3

- A.: r

- B.: B.

- B.: 7

- B.: 8

- N: N

- C.: C.

- C.: 8

- C.: 7

- N: N

- D.: D.

- D.: 4

- D.: r

- D.: 13.

- D.: In the formula of volume of right circular cylinder $V =$

- N: N

- N: r

- N: 2

- N: h

- N: r

- N: (

- N: May 22

- N:)

- A.: A.

- A.: Diameter

- B.: B.

- B.: Height

- C.: C.

- C.: Volume

- D.: D.

- D.: Radius

- D.: 14.

- D.: A cylindrical pencil sharpened at one end is a combination of (

- D.:)

- A.: A.

- A.: a cone and a cylinder.

- B.: B.

- B.: a cone and a hemisphere.

- C.: C.

- C.: a hemisphere and a cylinder.

- D.: D.

- D.: two cylinders .

- D.: (

- D.: 7

- D.:)

- MENSURATION: MENSURATION

- MENSURATION: March 2015 to

- MEN SURATIO N: r t

- MEN SURATIO N: 4

- MEN SURATIO N: t

- JUN E: JUN E

- JUN E: $\frac{1}{3} \pi r^2 t$

- JUN E: 4

- JUN E: 15.

- JUN E: If a solid sphere is melted and converted into a solid cylinder, then the volume of the cylinder

- JUN E: will (

- JUN E:)

- A.: A.

- A.: become double.

- B.: B.

- B.: remains unchanged.

- C.: C.

- C.: increase.

- D.: D.

- D.: decrease

- D.: 16.

- D.: The ratio of total surface areas of a hemisphere and a sphere with equal radii is (

- D.:)

- A.: A.

- A.: 3 :4

- B.: B.

- B.: 1 :2

- C.: C.

- C.: 4 :3

- D.: D.

- D.: 2 :1

- D.: 17.

- D.:

- D.: r

- D.: (

- D.: h

- D.: +

- D.: r

- D.:).In this fo rmul a,'

- D.: h

- D.: '

- D.: rep res en ts (

- D.:)

- A.: A.

- A.: Radi us

- B.: B.

- B.: d i amet er

- C.: C.

- C.: h eigh t

- D.: D.

- D.: slant height

- D.: 18.

- D.: The base diameter and height of a Right circular cone are 12

- D.: cm

- D.: and 8

- D.: cm

- D.: , then the slant

- D.: height is ____

- A.: A.

- A.: 10 cm

- B.: B.

- B.: 9 cm

- C.: C.

- C.: 20 cm

- D.: D.

- D.: 4 cm

- D.: 19.

- D.: If the ratio of surface areas of two spheres is 4: 9, then the ratio of their volumes is _

—

- A.: A.

- A.: 27 : 8

- B.: B.

- B.: 9 :4

- C.: C.

- C.: 16 : 81

- D.: D.

- D.: 8 :2 7

- TRIGON OME TRY: TRIGON OME TRY

- Ú: 1.

- Ú: A n ob s erv er fly ing in an l ati tu de of 9 0 0 mo bs erv es two sh ip s in front of

- Ú: hi m, whi ch are in th e

- Ú: s amed i rect io n at an an gl es of de p res sio n of 60

- Ú: 0

- Ú: an d 3 0

- Ú: 0

- Ú: res p ectiv ely .Find th e di stan ce

- Ú: b etw een th e tw o sh ips .(

- Ú:)

- Ú: 2.

- Ú: A person from th e top of a bu il din g of hei gh t 15 met ers ob s erv es th e top and th e bot to m (foot)

- Ú: of a cel l to w er wi th th e an gl e of elev ati on as 60

- Ú: 0

- Ú: and th e an gl e of de p res sio n as 45

- Ú: 0

- Ú: res p ectiv ely .Then fi nd th e hei gh t of th e cel l to w er.(

- Ú:)

- Ú: 3.

- Ú: Two p ol es of equ al hei gh t s are st an di ng op p osi t e to each o t h er, on ei t h er si d e of th e ro ad ,

- Ú: w h i c h i s 80
- Ú: m
- Ú: w i d e. F r o m a p o i n t b e t w e e n t h e m o n t h e r o a d , t h e a n g l e s o f e l e v a t i o n o f t o p o f
- Ú: t h e p o l e s a r e 60
- Ú: 0
- Ú: a n d 30
- Ú: 0
- Ú: r e s p e c t i v e l y . F i n d t h e h e i g h t o f t h e p o l e s . (
- Ú:)
- Ú: 4.
- Ú: A t r e e i s b r o k e n w i t h o u t s e p a r a t i n g f r o m t h e s t e m b y t h e w i n d . T h e t o p t o u c h e s t h e g r o u n d
- Ú: m a k i n g a n a n g l e 30
- Ú: 0
- Ú: a t a d i s t a n c e o f 12
- Ú: m
- Ú: f r o m t h e f o o t o f t h e t r e e . F i n d t h e h e i g h t o f t h e t r e e
- Ú: b e f o r e b r e a k i n g . (
- Ú:)
- Ú: 5.
- Ú: T w o p o l e s a r e s t a n d i n g o p p o s i t e t o e a c h o t h e r o n t h e e i t h e r s i d e o f t h e r o a d w h i c h i s 90 f e e t
- Ú: w i d e . T h e a n g l e o f e l e v a t i o n f r o m b o t t o m o f t h e f i r s t p o l e t o t h e t o p o f t h e s e c o n d P o l e i s
- Ú: 45

- Ú: 0

- Ú: .The angl eo f el evat ion from th eb ot to m of th e second pol e to th et op o f th e fi rst pol e is

- Ú: 3 0°. Fin d t he heig ht s o f th ep ol es .(us e

- Ú: $\frac{3}{4}$

- Ú: u

- Ú: = 1.7 32) (

- Ú:)

- AP P LICA TIO N S O F TRIG O NO ME TRY: AP P LICA TIO N S O F TRIG O NO ME TRY

- AP P LICA TIO N S O F TRIG O NO ME TRY: M arch 201 5 to

- AP P LICA TIO N S O F TRIG O NO ME TRY: r t

- AP P LICA TIO N S O F TRIG O NO ME TRY: 4

- AP P LICA TIO N S O F TRIG O NO ME TRY: t

- JUN E: JUN E

- JUN E: ï t r t

- JUN E: 4

- JUN E: 6.

- JUN E: T he angl e of el ev at ion oft op o f th e tow erfro mt wo p oi nts at ad is tance o f4 man d 9 mfro m

- JUN E: t h eb as e of th e tow erand in th e same to s t rai ght li ne wi th it ,areco mp lemen tary .Prove thatt h e

- JUN E: h eigh t o f th et ow eri s 6

- JUN E: m

- JUN E: . (

- JUN E:)

- JUN E: 7.

- JUN E: From the top of a tower of 50

- JUN E: m

- JUN E: high, Neha observes the angles of depression of the top and

- JUN E: foot of another building to be 45° and 60° respectively. Find the height of the building. (

- JUN E:)

- JUN E: 8.

- JUN E: Two boys on either side of the school building of 20

- JUN E: m

- JUN E: height observes it's top at the angles of

- JUN E: elevation 30° and 60° respectively. Find the distance between two boys.

- JUN E: (

- JUN E:)

- JUN E: 9.

- JUN E: The angle of elevation of the top of a hill from the foot of a tower is 60°

- JUN E: 0

- JUN E: and the angle of elevation

- JUN E: of the top of the tower from the foot of the hill is 30°

- JUN E: 0

- JUN E: . If the tower is 50

- JUN E: m

- JUN E: high. Find the height

- JUN E: of the hill. (

- JUN E:)

- JUN E: 10.

- JUN E: A man observes top of tower at an angle of elevation of 30° . When he walked 40

- JUN E: m

- JUN E: towards the

- JUN E: tower, the angle of elevation is changed to 60°

- JUN E: 0

- JUN E: . Find the height of the tower and distance from

- JUN E: the first observation point to the tower.

- JUN E: (

- JUN E:)

- JUN E: .

- JUN E: 11.

- JUN E: If two persons standing on either side of a tower of height 100 metres observe the top of it

- JUN E: with angles of elevation of 60°

- JUN E: o

- JUN E: and 45°

- JUN E: o

- JUN E: respectively, then find the distance between the two

- JUN E: persons .

- JUN E: (

- JUN E: May 20 22

- JUN E:)

- JUN E: 12.

- JUN E: If two boys standing on either side of their school

- JUN E: b uil di ng o f hei gh t 20 m,ob served t he top of

- JUN E: i t w ith angl es o f el evat ion of 30° an d 60° res pectiv el y ,th en fi nd th ed ist ance betw een th et wo

- JUN E: b oys .(

- JUN E:)

- JUN E: Part

- JUN E: -

- JUN E: b

- JUN E: 1.

- JUN E: x

- JUN E: à

- JUN E: t o d i rectly find th e dis t an ceb etw een th e foo t o f th el add erand th e fo ot oft he wall ,wh i ch

- JUN E: t rigo no met ri cal rat io s hou ld be con sid ered?

- JUN E: (

- JUN E:)

- A.: A.

- A.: s in

- A.: à

- B.: B.

- B.: co s

- B.: à

- C.: C.

- C.: t an

- C.: à

- D.: D.

- D.: $\cos t$

- D.: \hat{a}

- D.: 2.

- D.: Two persons A and B observe the top of a pole at an angle of elevation

- D.: =

- D.: and

- D.: >

- D.: respectively. If,

- D.: =

- D.: >

- D.: >

- D.: $\hat{a} \hat{a} \hat{a}$

- D.: .

- D.: (

- D.:)

- A.: A.

- A.: A is nearer to the pole than A

- B.: B.

- B.: B is nearer to the pole A

- C.: C.

- C.: A, B are at same distance from the pole.

- D.: D.

- D.: distances

- D.: 3.
- D.: =
- D.: considered for finding height of the building?
- D.: (
- D.:)
- A.: A.
- A.: tan
- A.: =
- B.: B.
- B.: sin
- B.: =
- C.: C.
- C.: cos
- C.: =
- D.: D.
- D.: sec
- D.: =
- D.: 4.
- D.: If the angle of
- D.: elevation of sun increases from 0
- D.: 0
- D.: to 90
- D.: 0
- D.: , then the length of shadow of the

- D.: (
- D.:)
- A.: A.
- A.: No change
- B.: B.
- B.: increases
- C.: C.
- C.: decreases
- D.: D.
- D.: 5.
- D.: The angle of depression from the top of the tower is 12° height it, the ground is 30° . The
- D.: distance of the point from the top is
- D.: (
- D.:)
- A.: A.
- A.: 12
- A.: $\frac{3}{4}$
- A.: u
- A.: m
- B.: B.
- B.: 7.5 m
- C.: C.
- C.: 6m
- D.: D.

- D.: 1 0m

- AP P LICA TIO N S O F TRIG O NO ME TRY: AP P LICA TIO N S O F TRIG O NO ME TRY

- AP P LICA TIO N S O F TRIG O NO ME TRY: M arch 201 5 to

- AP P LICA TIO N S O F TRIG O NO ME TRY: r t

- AP P LICA TIO N S O F TRIG O NO ME TRY: 4

- AP P LICA TIO N S O F TRIG O NO ME TRY: t

- JUN E: JUN E

- JUN E: ĩ t r t

- JUN E: 4

- JUN E: 6.

- JUN E: A ladd er tou ch es a wal l at ah eigh t o f 5

- JUN E: m

- JUN E: .

- JUN E: T he

- JUN E: ang le mad e by th e ladd erw ith th e gro und ,i f

- JUN E: i ts leng th is 10

- JUN E: m

- JUN E: ,wi ll be(

- JUN E:)

- A.: A.

- A.: 30

- A.: 0

- B.: B.

- B.: 60

- B.: 0

- C.: C.

- C.: 45

- C.: 0

- D.: D.

- D.: 90

- D.: 0

- D.: 7.

- A: A

- A: 20

- A: mlongladderis plac ed on apole of 1 0 m h ei gh t maki ng

- A: .

- A: anglew it h the

- A: grou nd,t hen

- A: .

- A: =

- A: (

- A:)

- A.: A.

- A.: 60

- A.: 0

- B.: B.

- B.: 45

- B.: 0

- C.: C.

- C.: 30

- C.: 0

- D.: D.

- D.: 0

- D.: 0

- D.: 8.

- D.: A ladder 15 m long just reaches the top of

- D.: vertical wall. If the ladder makes an angle of 60°

- D.: 0

- D.: with the wall. Then the height of the wall is

- D.: (

- D.:)

- A.: A.

- A.: 15

- A.: $\frac{3}{4}$

- A.: u

- A.: m

- B.: B.

- Ú: Ú

- Þ: Þ

- Þ: $\frac{3}{4}$

- Ü: Ü

- Û: Û

- U: m

- C.: C.

- C.: 7.5

- C.: m

- D.: D.

- D.: 15

- D.: m

- D.: 9.

- D.: If the ratio of the height of a pole and the length of its shadow is

- D.: $\frac{3}{4}$

- D.: u

- D.: :

- D.: 1 then the angle of

- D.: elevation

- A.: A.

- A.: 30

- B.: B.

- B.: 60

- C.: C.

- C.: 45

- D.: D.

- D.: 90

- PROBABILITY: PROBABILITY

- J: 1.

- J: There are 100 flash cards labelled from 1 to 100 in a bag. When a card is drawn from the bag at
- J: i)
- J: A card with a prime number from possible outcomes
- J: ii)
- J: A card with a composite number from possible outcomes. (
- J:).
- J: 2.
- J: A shopkeeper has 100 memory cards in a box. Among them, 15 memory cards are defective.
- J: When a person came to the shop to buy a memory card, the shopkeeper drew a memory card
- J: at random from the box. Then
- PROBABILITY: PROBABILITY
- PROBABILITY: March 2015 to
- PROBABILITY: r t
- PROBABILITY: 4
- PROBABILITY: t
- JUNE: JUNE
- JUNE: i t r t
- JUNE: 4
- JUNE: (i)
- JUNE: What is the probability that this memory card is defective?
- JUNE: (i i)
- JUNE: After drawing the first memory card which is defective, it is not placed

- JUN E: b ack i n t h e

- JUN E: b ox .Th en an oth er memo ry card is draw n at ran do m.What i s t he pro b abi li ty th at thi s

- JUN E: memo ry card i s NO T defe ct iv e? (

- JUN E:)

- JUN E: 3.

- A: A

- A: b ag co nt ain s

- A: 5 red b alls and so me bl ue bal ls .If th e p ro b abi li ty of d rawi ng ab lu eb all is

- A: d oub l eth at o f red ball ,fin d t he nu mb ero f blue b alls in th e bag . (

- A:)

- A: 4.

- A: T wo d i ce are ro ll ed at same ti me and th e su m of th e nu mb ers app eari ng o n t hem is not ed .

- A: Fi nd th e p ro b abi li ty of getti ng each su m, fro m 3 to 5 sep arately .(

- A:)

- A: 5.

- A: A bag co nt ain s s o me squar e card s .A pri me

- A: n umb er betw een 1 and 100 has been w rit t en o n

- A: each card .Fi nd th e p ro b abi li ty o f getti ng a card t hat t h e su m of th e dig it s o f a p rime nu mb er

- A: w rit t en on it ,is 8.

- A: (

- A:)

- A: 6.

- A: From the deck of 52 cards, if a

- A: what is randomly chosen, find the

- A: probability of getting a

- A: card with

- A: (

- A: i

- A:) ap rime nu mb eron it ,(

- A: ii

- A:) face on it .(

- A:)

- A: 7.

- A: Suppose you drop a di

- A: ce

- A: at random on the circular region of diameter 28 cm as shown in the

- A: figure. What is the probability that it will land inside the rectangle?

- A: (

- J: J

- J:)

- J: 8.

- J: If two dice are thrown at the same time, find the probability of getting a sum of 7 or less.

- J: top is prime.(

- J:)

- J: 9.

- J: From a pack of 52 playing cards, Jacks, Queens, Kings and Aces of red colour are

removed .

- J: From the remaining , a card is drawn at random. Find the probability that the card drawn is

- J: (i)

- J: a black queen ,(ii) red card .

- J: (

- J:)

- J: 10.

- J: A box contains 20 cards which are numbered from 1 to 20 .If one card is selected at random

- J: from the box ,find the probability that it bears

- J: (

- J: i

- J:)

- J: a prime number,

- J: (

- J: ii

- J:)

- J: an even number.

- J: (

- J: May 20 22

- J:)

- P: P

- P: art

- P: -

- P: b

- P: 1.

- P: If

- P(: P(

- E: E

- E:) = 0.82, then P(

- E: '

- E: \$

- E: (

- E:)

- A.: A.

- A.: 0.18

- B.: B.

- B.: 0.28

- C.: C.

- C.: 0.38

- D.: D.

- P(E) = P(: P(E) = P(

- P(E) = P(: '

- P(E) = P(: \$

- P(E) = P(:)

- P(E) = P(: 2.

- P(E) = P(: When an unbiased die is rolled once, what is the probability of getting a prime number

- P(E) = P(: out of all possible outcomes ?

- $P(E) = P(\cdot)$

- $P(E) = P(\cdot)$

- A.: A.

- A.: 5

- A.: 6

- B.: B.

- B.: 5

- B.: 7

- C.: C.

- C.: 5

- C.: :

- D.: D.

- D.: 1

- D.: 3.

- D.: Let E,

- D.: '

- D.: \$

- D.: be the complementary events, in a random experiment, then which of the

- D.: following is true?

- D.: (

- D.:)

- A.: A.

- $P(E) + P(\cdot) = P(E) + P(\cdot)$

- $P(E) + P(\cdot) =$

- $P(E) + P(: \$$
- $P(E) + P(:) = 2$
- B.: B.
- $P(E) + P(: P(E) + P($
- $P(E) + P(: '$
- $P(E) + P(: \$$
- $P(E) + P(:) = 3$
- C.: C.
- $P(E) + P(: P(E) + P($
- $P(E) + P(: '$
- $P(E) + P(: \$$
- $P(E) + P(:) = 1$
- D.: D.
- $P(E) + P(: P(E) + P($
- $P(E) + P(: '$
- $P(E) + P(: \$$
- $P(E) + P(:) = 4$
- $P(E) + P(: 7 \text{ cm}$
- $P(E) + P(: 11$
- $P(E) + P(: \text{cm}$
- P RO BAB IL IT Y: P RO BAB IL IT Y
- P RO BAB IL IT Y: M arch 201 5 to
- P RO BAB IL IT Y: r t
- P RO BAB IL IT Y: 4

- P RO BAB IL IT Y: t

- JUN E: JUN E

- JUN E: ĩ t r t

- JUN E: 4

- JUN E: 4.

- JUN E: Wh i ch on eo f th e fol lo win g can n ot be th ep rob abi li ty of th e ev en t ?

- JUN E: (

- JUN E:)

- A.: A.

- A.: 6

- A.: 7

- B.: B.

- B.: 8

- B.: 9

- C.: C.

- C.: 8

- C.: 9

- D.: D.

- D.: 6

- D.: 5 4 4

- D.: 5.

- D.: O n Rando m sel ecti on,t h ep rob abi li ty of get ti ng aco mp osi t enumb er among th e nu mb ers

- D.: fro m5 1 t o 10 0 i s

- D.: (

- D.:)

- A.: A.

- A.: 8

- A.: 9

- B.: B.

- B.: 5

- B.: 9

- C.: C.

- C.: 7

- C.: 9

- D.: D.

- D.: 6

- D.: 9

- D.: 6.

- D.: L et E an d

- D.: %

- D.: b e th e

- D.: comp lemen tary ev ent s .If P(

- D.: %

- D.:) =0 .65 ,th en P(E) =.....

- D.: (

- D.:)

- A.: A.

- A.: 0 .40

- B.: B.

- B.: 0.45

- C.: C.

- C.: 0.35

- D.: D.

- D.: 0.30

- D.: 7.

- D.: A t w h a t

- D.: x

- D.: 9

- D.: \ddot{e}

- D.: may p o s s i b l e p r o b a b i l i t y o f a n e v e n t ?

- D.: (

- D.:)

- A.: A.

- A.: 2

- B.: B.

- B.: 1

- C.: C.

- C.: 4

- D.: D.

- D.: 6

- D.: 8.

- D.: If $P(E)$

- D.: i s t h e p r o b a b i l i t y o f a n e v e n t E t h e n (

- D.:)

- A.: A.

- $0 < P(E) < 1$: $0 < P(E) < 1$

- B.: B.

- C.: C.

- D.: D.

- D.: 9.

- D.: T h e

- D.: p r o b a b i l i t y o f g e t t i n g r i g h t a n s w e r t o a q u e s t i o n i s i s 0.6 8 t h e p r o b a b i l i t y o f g e t t i n g

- D.: w r o n g

- D.: a n s w e r i s (

- D.:)

- A.: A.

- A.: 0 .32

- B.: B.

- B.: 3 2%

- C.: C.

- C.: 32

- D.: D.

- D.: A a n d B

- D.: 10.

- D.: F r o m a s e t o f

- D.: s i n g l e d i g i t n a t u r a l n u m b e r s ,

- D.: if a number is chosen at random, then the

- D.: probability that the number chosen is a multiple of 2, is ... (

- D.:)

- A.: A.

- A.: 8

- A.: =

- B.: B.

- B.: 5

- B.: 7

- C.: C.

- C.: =

- C.: 8

- D.: D.

- D.: 6

- D.: 9

- D.: 11.

- D.: If $P(E)$ The probability of an event then ... (

- D.:)

- A.: A.

- $P(E)$: $P(E)$

- R: R

- R: 1

- B.: B.

- $P(E)$: $P(E)$

- C.: C.
- D.: D.
- $P(E)$: $P(E)$
- $P(E)$: 12.
- $P(E)$: A letter is chosen from the word
- $P(E)$: probability that
- $P(E)$: it was not a
- $P(E)$: vowel is
- $P(E)$: (
- $P(E)$:)
- A.: A.
- A.: 5
- A.: 6
- B.: B.
- B.: 7
- B.: 6
- C.: C.
- C.: 8
- C.: 7
- D.: D.
- D.: 7
- D.: 8
- D.: 13.
- D.: The probability of sure event is (

- D.:)

- A.: A.

- A.: 0

- B.: B.

- Ú: Ú

- Ô: Ô

- C.: C.

- C.: 1

- D.: D.

- D.: U nd efin ed

- D.: 14.

- D.: A di ce is

- D.: th row n on ce.T h ep ro babi lit y o fg etti ng apri me nu mber is

- D.:

- D.: (

- D.:)

- A.: A.

- Ú: Ú

- Ü: Ü

- B.: B.

- Ú: Ú

- Ô: Ô

- C.: C.

- Ô: Ô

- Ü: Ü
- D.: D.
- Ú: Ú
- Ú: ß
- Ú: 15.
- Ú: If E and
- Ú: %
- Ú: are mutually complementary events in a random experiment and $P($
- Ú: %
- Ú:) = 0.3,
- Ú: the value of $P(E)$ is
- Ú: (
- Ú: May 20 22
- Ú:)
- A.: A.
- A.: 0.3
- B.: B.
- B.: 0.7
- C.: C.
- C.: 1
- D.: D.
- D.: 0
- D.: 16.
- D.: probability of getting a vowel is

- D.: (
- D.: Ma y 2022
- D.:)
- A.: A.
- A.: 8
- A.: 9
- B.: B.
- B.: 7
- B.: 9
- C.: C.
- C.: 6
- C.: 9
- D.: D.
- D.: 5
- D.: 9
- D.: 17.
- D.: A mo ng th e fo llo win g,t h ev alu ewh i ch is no t
- D.: p oss ib le for t he pro babi lit y o f an event i s
- A.: A.
- A.: 5
- A.: 7
- B.: B.
- B.: 0 .5
- C.: C.

- C.: 2 5%
- D.: D.
- D.: 8
- D.: 7
- P RO BAB IL IT Y: P RO BAB IL IT Y
- P RO BAB IL IT Y: M arch 201 5 to
- P RO BAB IL IT Y: r t
- P RO BAB IL IT Y: 4
- P RO BAB IL IT Y: t
- JUN E: JUN E
- JUN E: i t r t
- JUN E: 4
- JUN E: 18.
- JUN E: If onel et ter is sel ect ed ran do ml y fro mt he letters of th e wo rd "EX AMIN AT ION ",
th en th e
- JUN E: p rob abi li ty of gett in g a vowel is
- JUN E: (
- JUN E: A ug22
- JUN E:)
- A.: A.
- Þ: Þ
- Ú: Ú
- Û: Û
- B.: B.
- B.: ß

- Ú: Ú

- Ú: Ú

- C.: C.

- Ý: Ý

- Ý: â

- D.: D.

- Þ: Þ

- Ú: Ú

- Ú: Ú

- Ú: 19.

- Ú: A fish tank has 5 male fish and 8 female

- Ú: fish. If a fish is randomly taken out of it, then the

- Ú: probability of getting a male fish is .

- Ú: (

- Ú:)

- A.: A.

- A.: 9

- A.: <

- B.: B.

- B.: 9

- B.: 5 7

- C.: C.

- C.: <

- C.: 9

- D.: D.
- D.: 57
- D.: 9
- D.: 20.
- D.: In aran do m exp eri men t E an d
- D.: %
- D.: are compl ement ary event s .
- D.: If $P(E) = 0.43$ th en $P($
- D.: %
- D.:)
- D.: i s
- D.: (
- A: A
- A: 2
- A: 3
- A:)
- A.: A.
- A.: 0.57
- B.: B.
- B.: 0.43
- C.: C.
- C.: 0.17
- D.: D.
- D.: 1

- D.: 21.

- D.: In aran do m exp eri men t ,E and

- D.: '

- D.: \$

- D.: are co mplement ary ev en ts .If $P(E) =$

- D.: 5

- D.: :

- D.: ,t h en $P($

- D.: '

- D.: \$

- D.:)

- D.: (

- D.:)

- A.: A.

- A.: 9

- A.: :

- B.: B.

- B.: 8

- B.: :

- C.: C.

- C.: 0

- D.: D.

- D.: 1

- D.: 22.

- D.: Which of the

- D.: following can't be the probability of an event? (

- D.:)

- A.: A.

- A.: 9

- A.: 8

- B.: B.

- B.: 0.75

- C.: C.

- C.: 2 :3

- D.: D.

- D.: 46%

- D.: 23.

- D.: A bag contains 10 black balls. If one ball is selected randomly from the bag, then the

- D.: probability of getting a white ball is (

- D.:)

- A.: A.

- A.: 0

- B.: B.

- B.: 5

- B.: 6

- C.: C.

- C.: 5

- C.: 7

- D.: D.
- D.: 5
- D.: 5 4
- D.: 24.
- D.: Which of the following cannot be probability of an event?
- A.: A.
- A.: s
- A.: 5
- A.: 6
- B.: B.
- B.: 0 .35
- C.: C.
- C.: 4 0%
- D.: D.
- D.: 6
- D.: 7
- D.: 25.
- D.: E and
- D.: %
- D.: are complementary events in an experiment .If $P(E) = 0.7$,then
- P: P
- P: (
- P: %
- P:) = _ _

- A.: A.

- A.: 0.7

- B.: B.

- B.: 1

- C.: C.

- C.: 0.3

- D.: D.

- D.: 0

- D.: 26.

- D.: The probability of getting 8 as sum of numbers on two dice, when they are rolled is
—

- A.: A.

- A.: <

- A.: 7 :

- B.: B.

- B.: 5

- B.: 56

- C.: C.

- C.: 5

- C.: =

- D.: D.

- D.: 55

- D.: 7 :

- STATISTICS: STATISTICS

OBJECTIVE