

CA FOUNDATION



MARATHON

JUNE 2024

Quantitative Aptitude

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Number Series

5 marks

Coding & Decoding
odd man out

Natural no = $1, 2, 3, 4, \dots$

Even no. = $\underline{0, 2, 4, 6, 8, 10, 12, 14, \dots}$

odd no. = $\underline{1, 3, 5, 7, 9, 11, 13, 15, \dots}$

Prime no. = $2, 3, 5, 7, 11, 13, 17, 19, 23, \dots$

$\boxed{1 \text{ is not prime no.}}$

$$1^2 = 1$$

$$2^2 = 4$$

$$3^2 = 9$$

$$4^2 = 16$$

$$5^2 = 25$$

$$6^2 = 36$$

$$7^2 = 49$$

$$8^2 = 64$$

$$9^2 = 81$$

$$10^2 = 100$$

$$11^2 = 121$$

$$12^2 = 144$$

$$13^2 = 169$$

$$14^2 = 196$$

$$15^2 = 225$$

$$1^3 = 1$$

$$2^3 = 8$$

$$3^3 = 27$$

$$4^3 = 64$$

$$5^3 = 125$$

$$6^3 = 216$$

$$7^3 = 343$$

$$8^3 = 512$$

$$9^3 = 729$$

$$10^3 = 1000$$

A = 1
B = 2
C = 3
D = 4
E = 5
F = 6
G = 7
H = 8
I = 9
J = 10
K = 11
L = 12
M = 13

N = 14
O = 15
P = 16
Q = 17
R = 18
S = 19
T = 20
U = 21
V = 22
W = 23
X = 24
Y = 25
Z = 26

f = fix = six
G = 5

H = 8

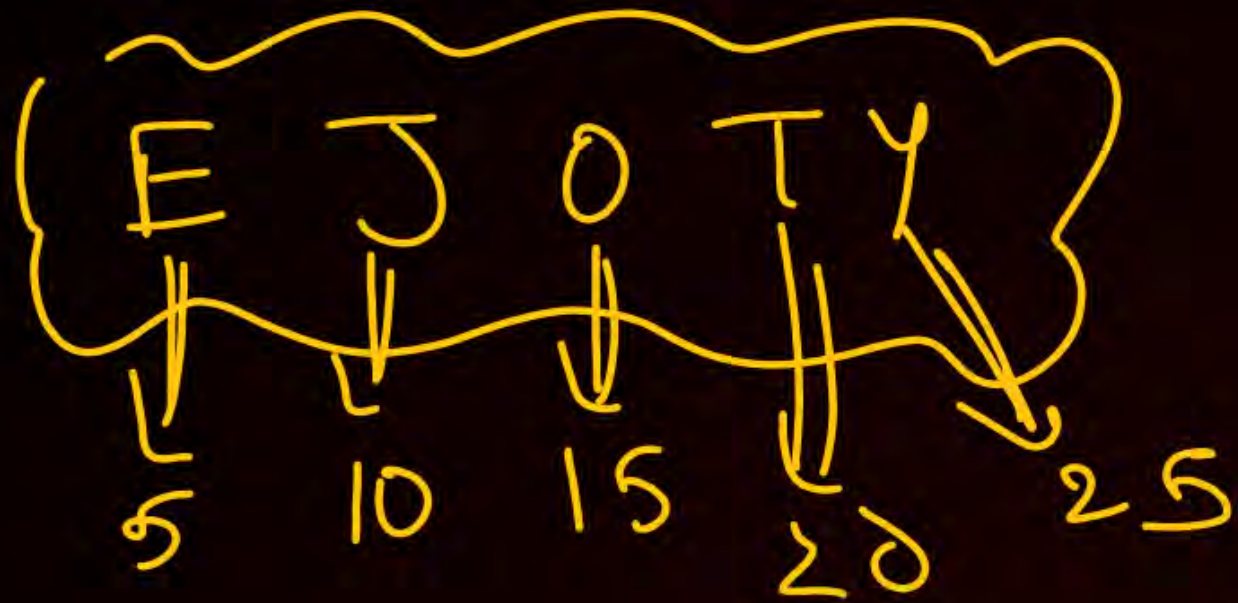
I = I know
± 9

L = Love = 12

M = 13

W = 3 = 3

N = 14 - Nov. children



Q 2, 4, 6, 8, 10

Q 3, 5, 7, 9, 11, 13

Q 2, 3, 5, 8, 12, ?

1 2 3 4 5

= 12 + 5

= 17

Q 1, 4, 9, 16, 25, ?

1² 2² 3² 4² 5²

6² = 36

Q 4, 16, 36, 64, ?

2² 4² 6² 8² 10² = 100

Q 4, 9, 25, 49, 121, 169, ?

2² 3² 5² 7² 11² 13² 17² = 289

Q 1, 3, 9, 27, 81, ?

x3 x3 x3 x3 x3

81 x 3 = 243

Q.1)

$$56 + 25 = 81$$

6, 11, 21, 36, 56, ?



a) 42

b) 51

c) 81

d) 91



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Q.2)

6, 12, 21, 33

6 9 12 15

6, 12, 21, 33

$$\begin{array}{r} 33 \\ + 15 \\ \hline 48 \end{array}$$

a) 33

b) 38

c) 40

d) 48



CA WALLAH

Q.3)

$\overset{-21}{\curvearrowright} \overset{-19}{\curvearrowright} \overset{-17}{\curvearrowright} \overset{-15}{\curvearrowright} \overset{-13}{\curvearrowright}$
120, 99, ?, 63, 48, 35

a) 80 b) 36 c) 45 d) 40

$$120 - 21 = 99$$

$$99 - 19 = 80$$

$$80 - 17 = 63$$

~~Q11~~

$\xrightarrow{+2}$ $\xrightarrow{4}$ $\xrightarrow{8}$ $\xrightarrow{16}$ $\xrightarrow{32}$
 22, 24, 28, 36, ?, 84

(a) 44 (b) 52 (c) 38 (d) 54

$$36 + 16 = 52$$

$$52 + 32 = 84$$

Q1)

5 10 15 20 25
6, 11, 21, 36, 56, ?

- a) 42 b) 51 c) 81 d) 91

Q.1)

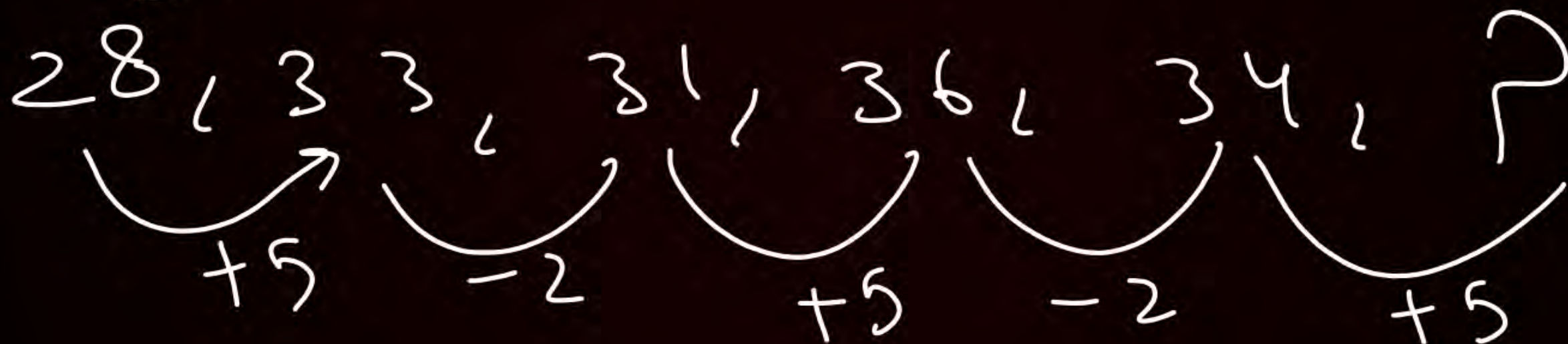
6,11,21,36,56, ?

a)42 b)51 c)81 d)91

Q.

28, 33, 31, 36, 34, ?

(a) 38 (b) 39 (c) 40 (d) 42



$$34 + 5 = 39$$

Q.

2, 15, 41, 80, 132 ?

$\xrightarrow{+13}$ $\xrightarrow{+26}$ $\xrightarrow{+39}$ $\xrightarrow{+52}$ $\xrightarrow{+65}$

(a) 184

(b) 144

(c) 186

(d) 197

Q. $2^2 \rightarrow 3^2 \rightarrow 5^2 \rightarrow 7^2 \rightarrow 11^2 \rightarrow 13^2 \rightarrow 17^2 \rightarrow 19^2$
 4, 9, 25, 49, ?, 169, 289, 361

(a) 120

(b) 121

(c) 122

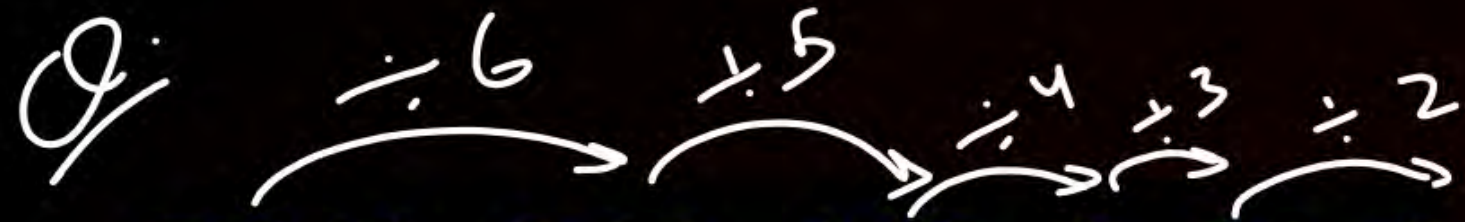
(d) 164

$11^2 = 121$

1, 1, 4, 8, 9, ?, 16, 64

(a) 27 (b) 28 (c) 32 (d) 40

$1, \downarrow 1^2$
 $1, \downarrow 1^3$
 $4, \downarrow 2^2$
 $8, \downarrow 2^3$
 $9, \downarrow 3^2$
 $?, \downarrow 3^3$
 $16, \downarrow 4^2$
 $64, \downarrow 4^3$



5760, 960, 192, ? 16, 8

(a) 47

(b) 48

(c) 52

(d) 50

$$\frac{192}{4} = 48$$

1, 2, 6, 7, 21, 22, 66, ? , 201

(a) 69

(b) 68

✓ (c) 67

(d) 69

67
x 3

$\div 2$ $\times 4$ $\div 2$ $\times 4$
48, 24, 96, ?, 192

☒ (a) 48

(b) 47

(c) 44

(d) 54

48

$+30$ $+60$ $+30$ $+60$
 165, 195, 255, 285, ?, 375

~~(a) 345~~

(b) 390

(c) 335

(d) 395

\downarrow
 345
 $+30$

285
 $+60$

 345

$\begin{matrix} 2 & 3 & 1 \\ 2 & 2 & 1 \end{matrix}$
 $\begin{matrix} 3 & 3 & 1 \\ 3 & 2 & 1 \end{matrix}$
 $\begin{matrix} 4 & 3 & 1 \\ 4 & 2 & 1 \end{matrix}$
 $\begin{matrix} 5 & 3 & 1 \\ 5 & 2 & 1 \end{matrix}$
 $\begin{matrix} 6 & 3 & 1 \\ 6 & 2 & 1 \end{matrix}$
 7, 26, 63, 124, 215, ?, 511

(a) 342

(b) 343

(c) 441

(d) 421

$$\begin{aligned}
 &\downarrow \\
 &7^3 - 1 \\
 &= 343 - 1 \\
 &= 342
 \end{aligned}$$

6, 13, 28, 59, ?

~~(a) 122~~

(b) 114

(c) 113

(d) 112

$$\begin{array}{cccc}
 6 & , & 13 & , & 28 & , & 59 & , & ? \\
 \text{---} & & \text{---} & & \text{---} & & \text{---} & & \text{---} \\
 \times 2 + 1 & & + 2 + 2 & & + 2 + 3 & & + 2 + 4
 \end{array}$$

$$\begin{aligned}
 &= 59 + 2 + 4 \\
 &= 102
 \end{aligned}$$

8, 28, 116, 584, ?

- (a) 1752
- (b) 3502
- (c) 3504
- (d) 3508

$$\begin{array}{ccccccc}
 8 & , & 28 & , & 116 & , & 584 \\
 \swarrow & & \nearrow & & \swarrow & & \nearrow \\
 \times 3 + 4 & & \times 4 + 4 & & \times 5 + 4 & & \times 6 + 4
 \end{array}$$

$$\begin{aligned}
 & (584 \times 6) + 4 \\
 & = 3508
 \end{aligned}$$

5, 2, 7, 9, 16, 25, 41, ?

(a) 65

(b) 66

(c) 67

(d) 68

$$\begin{array}{r} 25 \\ 41 \\ \hline 66 \\ \hline \end{array}$$

Find the next number in the series:

7, 23, 47, 119, 167

(a) 211

(b) 223

(c) 287

(d) 319

$$\begin{array}{ccccccccc} 7 & , & 23 & , & 47 & , & 119 & , & 167 \\ \downarrow & & \downarrow & & \downarrow & & \downarrow & & \downarrow \\ 3^2 - 2 & & 5^2 - 2 & & 7^2 - 2 & & 11^2 - 2 & & 13^2 - 2 \end{array}$$

$$\begin{array}{l} \text{, } 17^2 - 2 \\ = 287 \end{array}$$

Complete the series.

4, 16, 36, 64, 100 _____ 144

(a) 144

(b) 121

(c) 49

(d) 120

2^2
 4^2
 6^2
 8^2
 10^2
 12^2

Complete the series

4, 16, 256, 1024

(a) 32
(b) 48
(c) 64
(d) 46

Handwritten solution showing the pattern:

$4^1 = 4$
 $4^2 = 16$
 $4^3 = 64$
 $4^4 = 256$
 $4^5 = 1024$

The correct answer is (c) 64.

Handwritten solution showing the pattern:

$2^1 = 2$
 $2^2 = 4$
 $2^3 = 8$
 $2^4 = 16$
 $2^5 = 32$
 $2^6 = 64$
 $2^7 = 128$
 $2^8 = 256$
 $2^9 = 512$
 $2^{10} = 1024$

The correct answer is (c) 64.

Find the next term 1, 5, 21, 57,

(a) 105

(b) 138

(c) 121

(d) 101

$$\begin{array}{cccc} \text{---} & \text{---} & \text{---} & \text{---} \nearrow \\ 4 & 16 & 36 & 64 \\ \Downarrow & \Downarrow & \Downarrow & \nearrow \\ 2^2 & 4^2 & 6^2 & 8^2 \end{array}$$

$$57 + 64 = 121$$

Find the next term $\frac{1}{2}, \frac{3}{4}, \frac{5}{8}, \frac{7}{16}, ?$

(a) $\frac{9}{32}$

(b) $\frac{10}{17}$

(c) $\frac{11}{34}$

(d) $\frac{12}{35}$

$$\frac{9}{32}$$

Find out the next term -

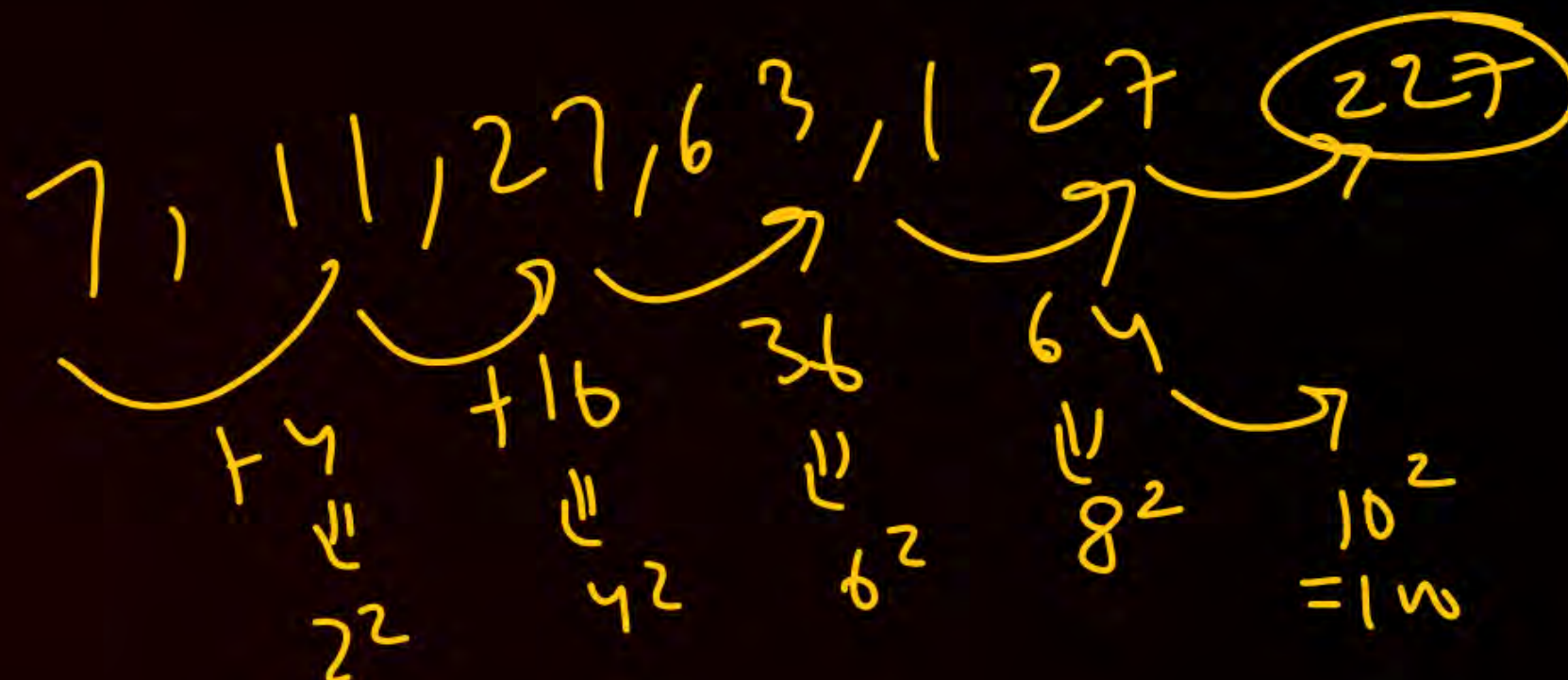
7, 11, 27, 63, 127, —

(a) 511

(b) 227

(c) 5100

(d) 255



Find the missing number:

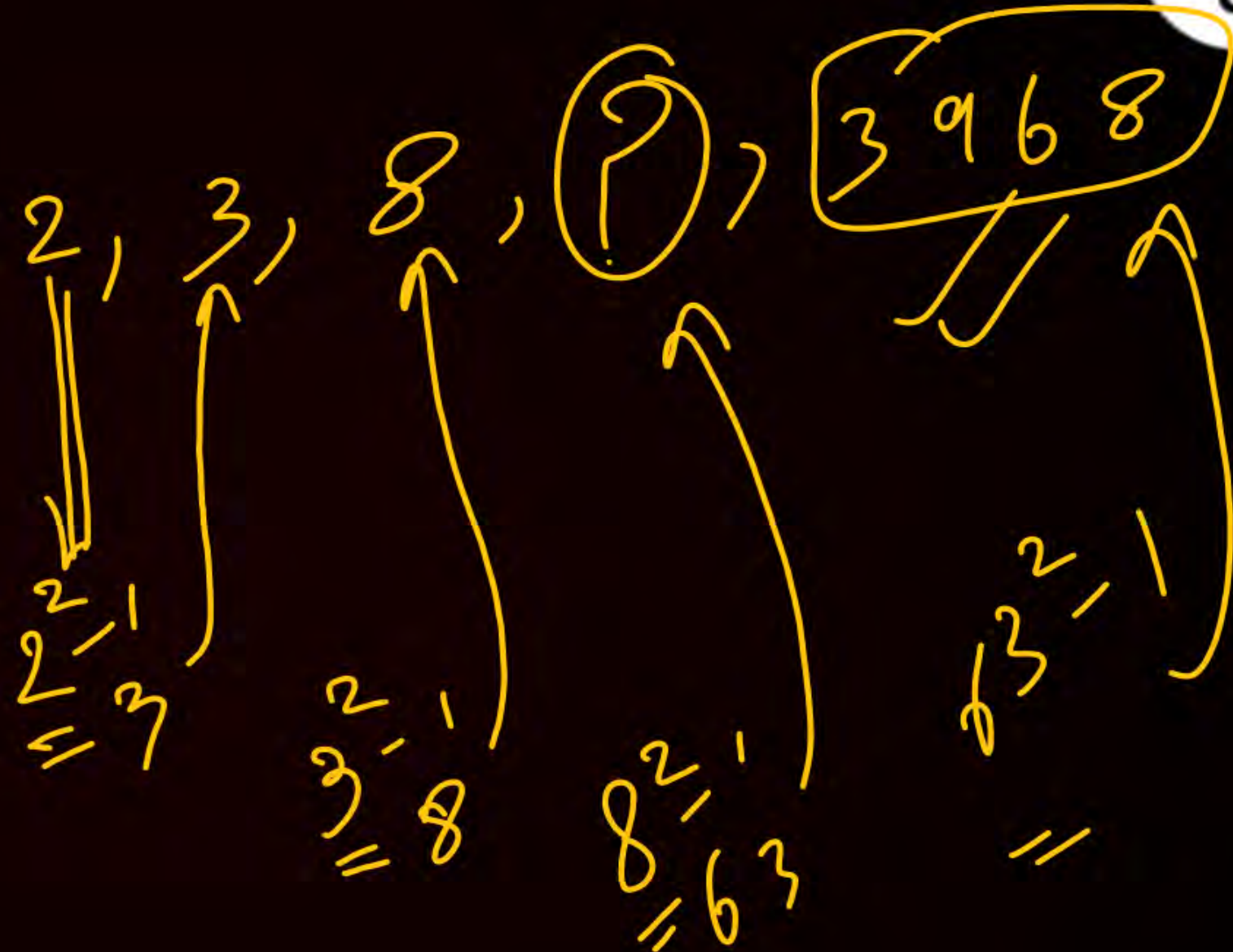
2, 3, 8, ?, 3968

(a) 65

(b) 63

(c) 70

(d) 80



Find the next number in the series:

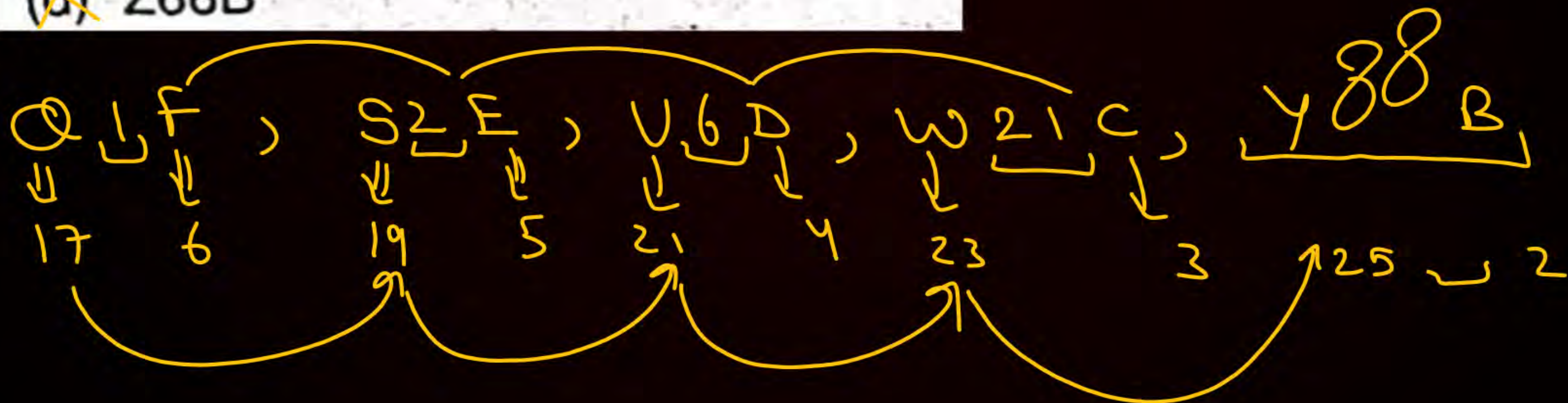
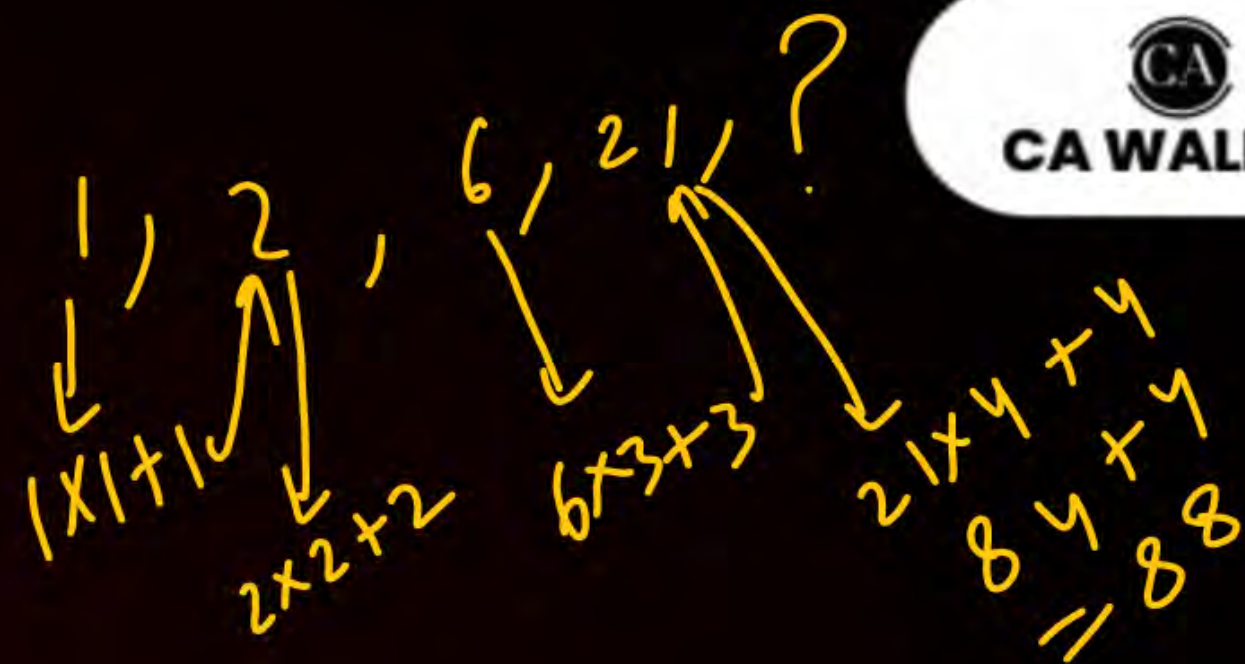
Q1F, S2E, U6D, W21C

(a) Y66B

(b) Y44B

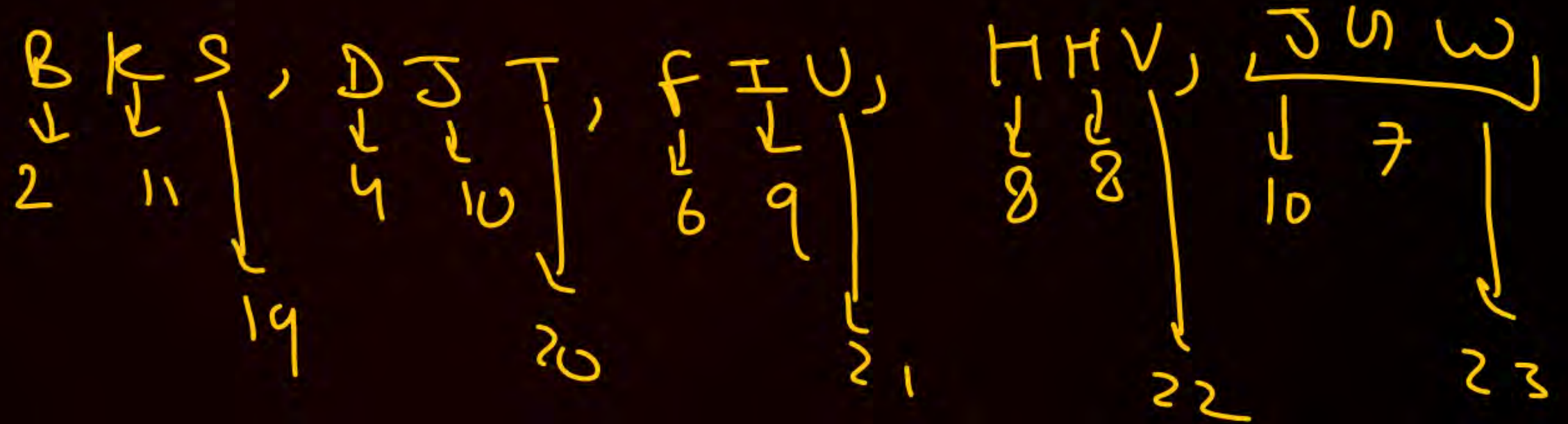
☒ (c) Y88B

☐ (d) Z66B



Find the next term of the series
BKS, DJT, FIU, HHV ?

- ✗ a) KGW
 ✗ b) JGW
 c) JGK
 ✗ d) IWK



aab_aaa_bba_

A) b bb

B) a ab

C) b bb

D) baa

a a b b a a a b b b a b

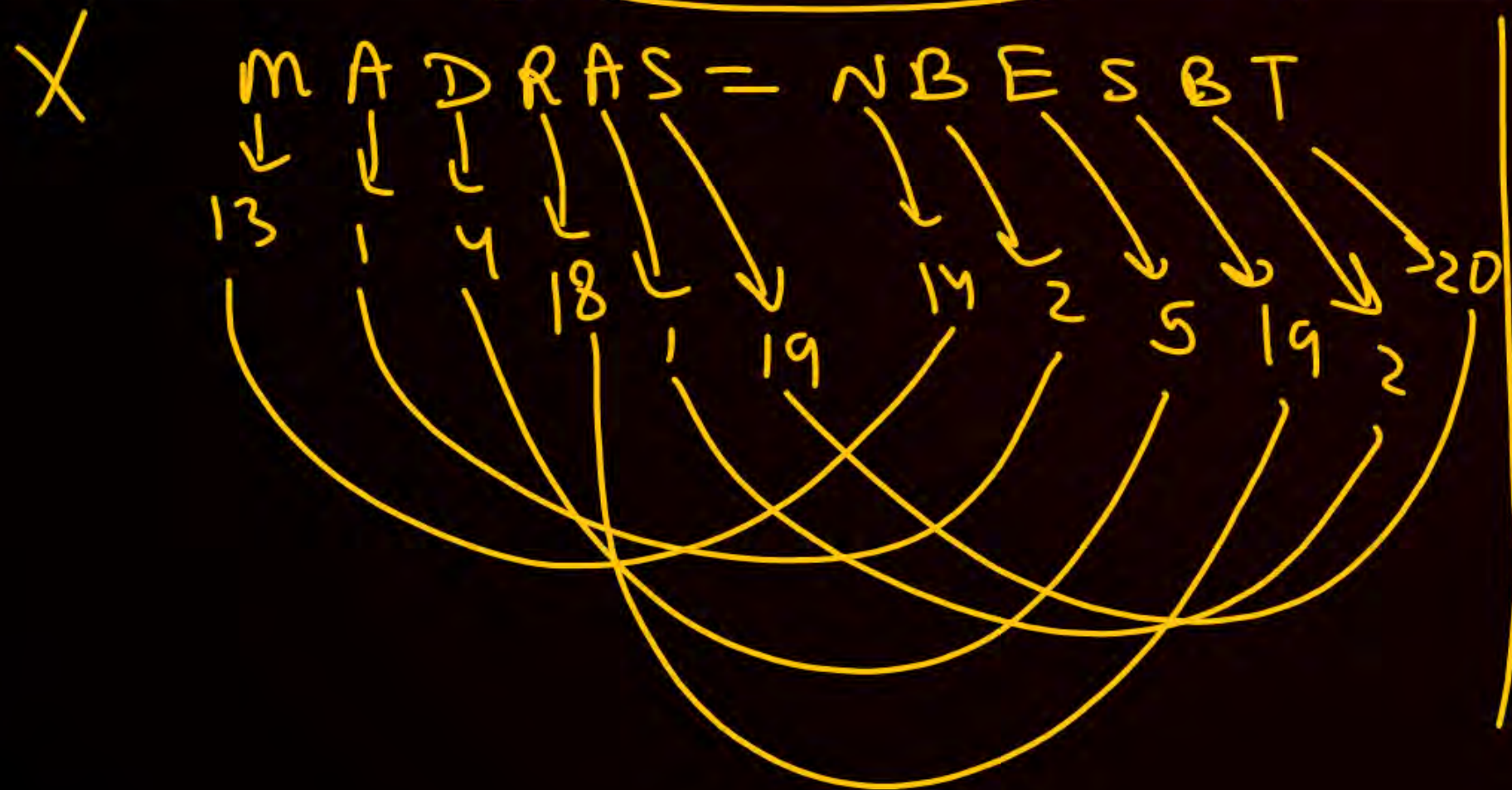


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Coding Decoding

In a certain language, MADRAS is coded NBESBT, how DELHI is coded in that code?

- (a) EMMJI (b) EFMIJ (c) EMFIJ (d) JIFEM

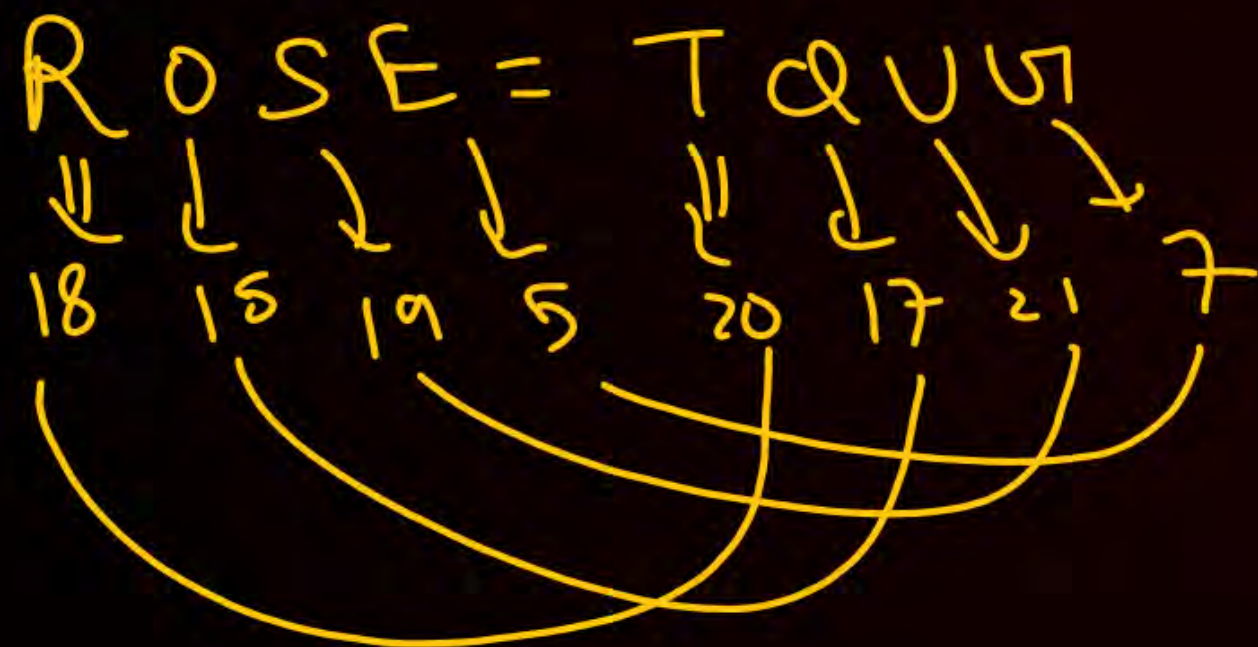


4 5 12 8 9
D E L H I

5 6 13 9 10
F F M H J

If ROSE is written as TQUG, how BISCUIT can be written in that code?

- (a) DKUEWKV (b) CJTDVJU (c) DKVEWKV (d) DKUEWKY



BISCUIT

DKUEWKV

If RAMAN is written as 12325 and DINESH as 675489 how HAMAM is written?

(a) 92323

(b) 92233

(c) 93233

(d) 93292

R A M A N = 1 2 3 2 5



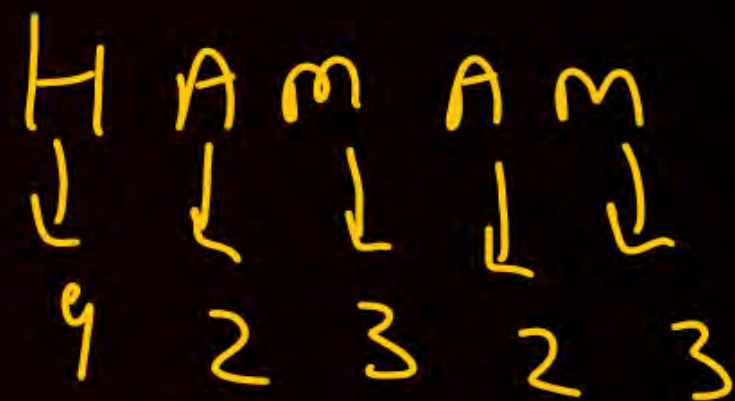
D I N E S H = 6 7 5 4 8 9



H A M A M

↓ ↓ ↓ ↓ ↓

9 2 3 2 3





If BROTHER is coded 2456784, SISTER coded as 919684, what is coded for BORBERS?

(a) 2542849

(b) 2542898

(c) 2454889

(d) 2524889

If $A = 1$, $FAT = 27$, $FAITH = ?$

(a) 44

(b) 45

(c) 46

(d) 36

$A = 1$
↓
1

$FAT = 27$
↓ ↓ ↓
6 1 20

F A I T H
↓ ↓ ↓ ↓ ↓
6 1 9 20 8

$$6 + 1 + 9 + 20 + 8 = 44$$

If RED is coded as 6720 then GREEN would be coded as

(a) 9207716

(b) 167129

(c) 1677209

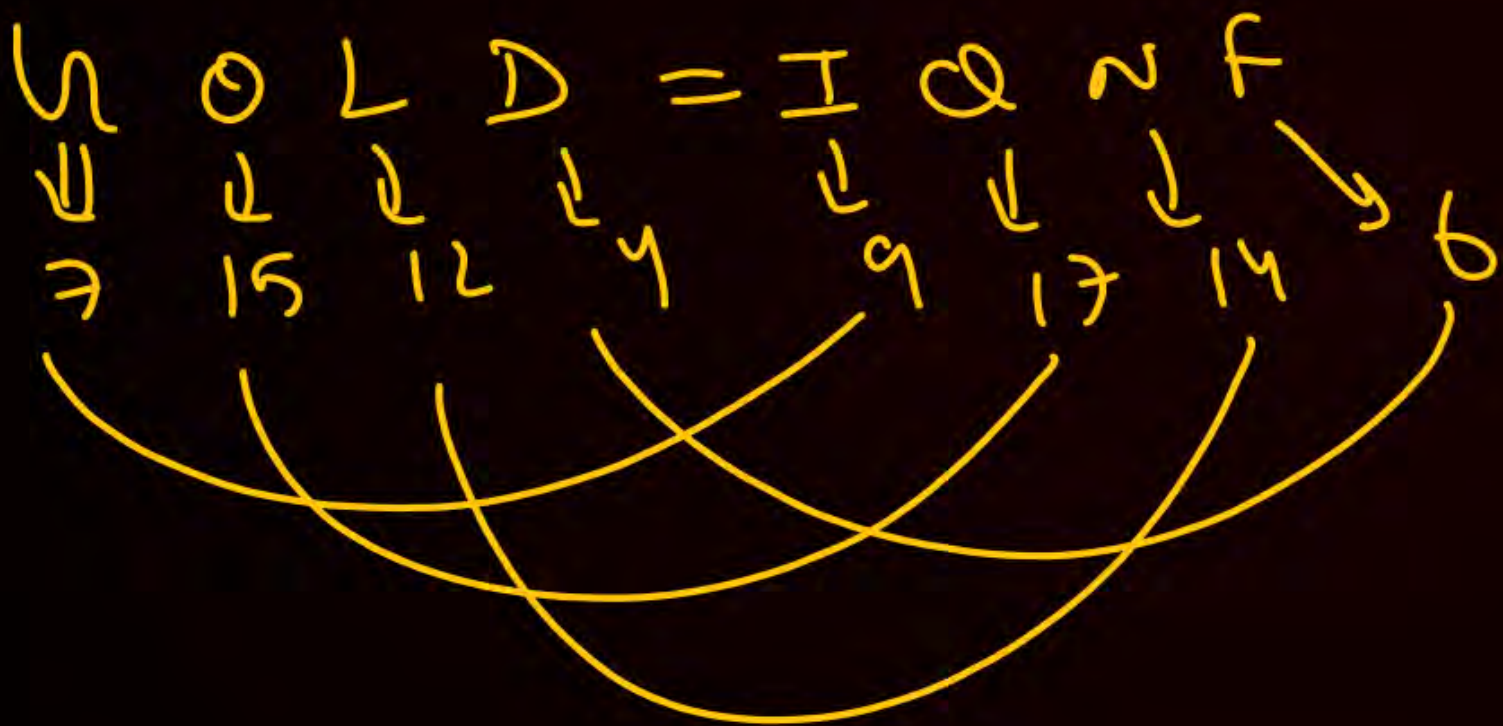
(d) 1672091

$$\begin{array}{rcl}
 R & E & D = 6720 \\
 \downarrow & \downarrow & \downarrow \\
 18 & 5 & 4 \\
 + & + & + \\
 2 & 2 & 2 \\
 \hline
 20 & 7 & 6
 \end{array}$$

$$\begin{array}{rclclcl}
 G & R & E & E & N \\
 \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\
 7 & 18 & 5 & 5 & 14 \\
 + & + & + & + & + \\
 2 & 2 & 2 & 2 & 2 \\
 \hline
 9 & 20 & 7 & 7 & 16 \\
 \hline
 18 & 7 & 7 & 20 & 9
 \end{array}$$

If GOLD is written as IQNF, how WIND can be written as code?

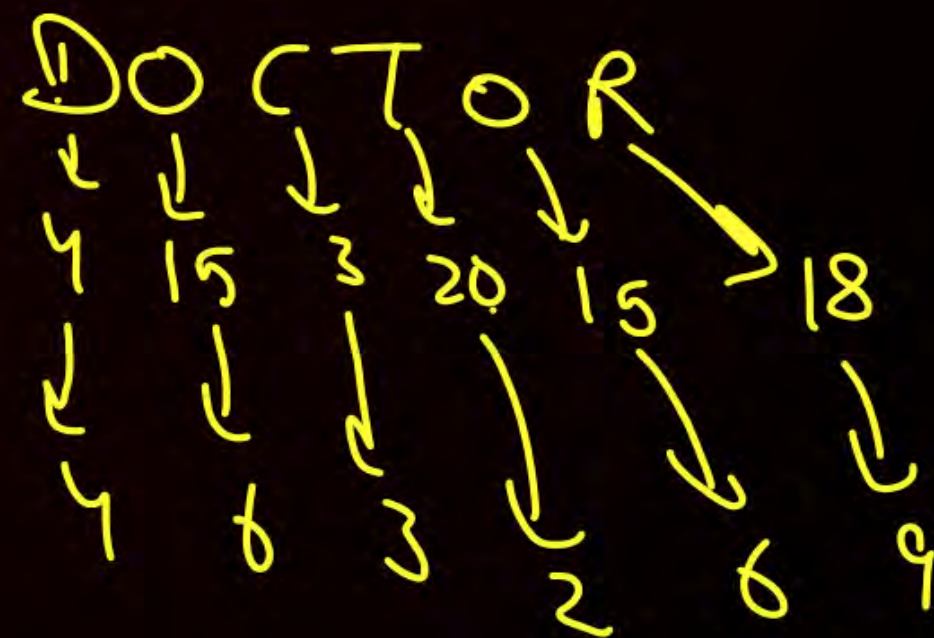
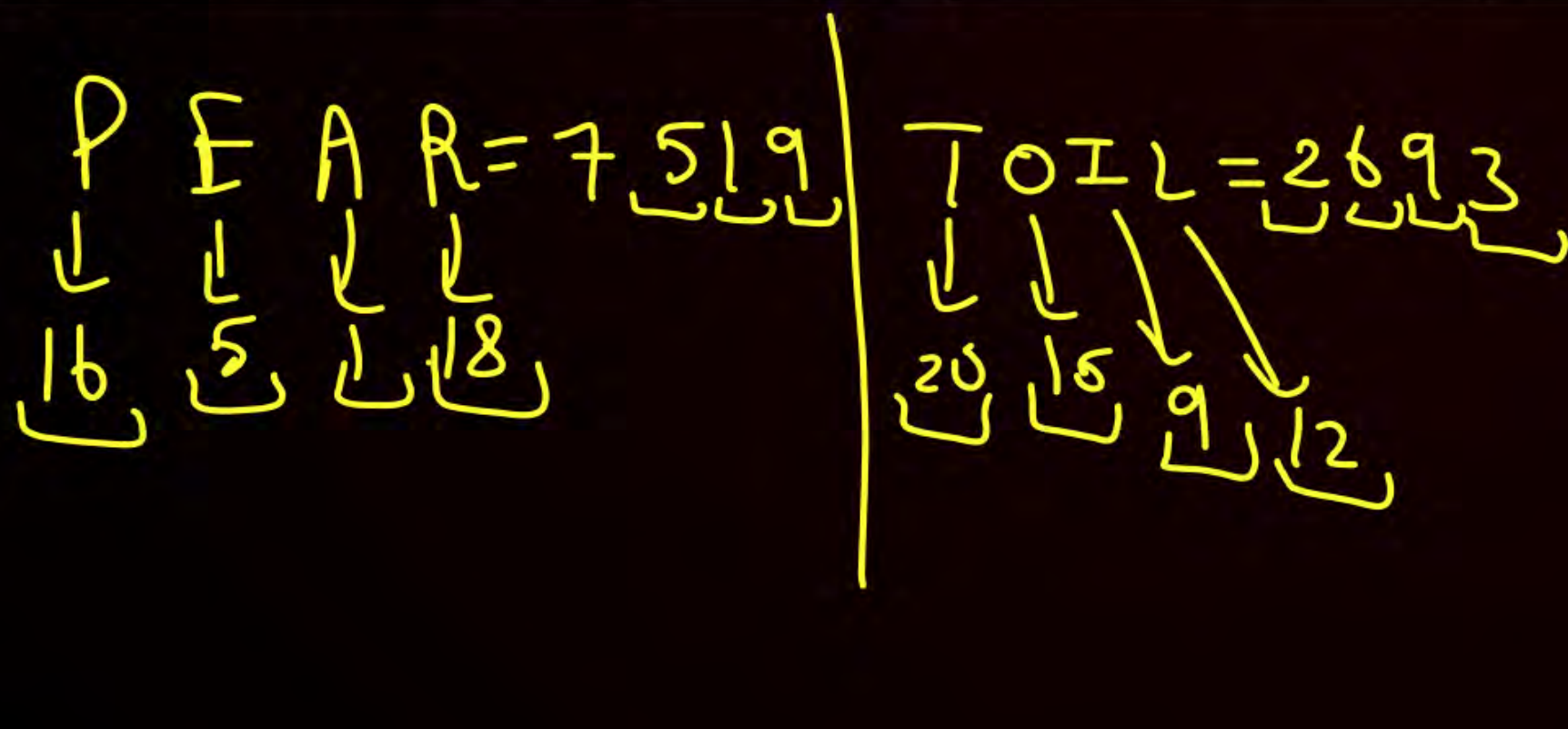
- (a) YKPF (b) VHCM (c) XJOE (d) DNIW



In certain language, PEAR is coded as 7519, and TOIL is coded as 2693, then how DOCTOR be written in that code?

- (a) 463293
- (b) 463239
- ☒ (c) 463269
- (d) 463296

(1 mark)



SYSTEM is coded as 131625 then TERMS will be coded as?

(a) 62251

(b) 62451

(c) 64251

(d) 62415

(1mark)

~~SYSTEM = 131625~~

~~↓ ↓ ↓ ↓ ↓~~

~~19 25 14 20 13~~

~~5~~

TERMS =

↓ ↓ ↓ ↓

6 2 5 1

22

In a certain code '256' means 'you are good', '637' means 'we are bad' and '358' means 'good and bad'. Which of the following represents 'and' in that code?

(a) 2

(b) 5

(c) 8

(d) 3

(1 mark)

2 5 6 = $\boxed{\text{You} = 2}$ $\boxed{\text{Are} = 6}$ $\boxed{\text{Good} = 5}$

6 3 7 = $\boxed{\text{We} = 7}$ $\boxed{\text{Are} = 6}$ $\boxed{\text{Bad} = 3}$

3 5 8 = $\boxed{\text{Good} = 5}$ $\boxed{\text{And} = 3}$ $\boxed{\text{Bad} = 8}$
and = 3

and = ?

Odd man out

3, 5, 7, 15, 17, 19

15 not prime

(a) 15

(b) 17

(c) 19

(d) 7

10, 14, 16, 18, 23, 24, 26

odd

(a) 26

(b) 23

(c) 24

(d) 18

1, 4, 9, 16, 24, 25, 36

Not a Perfect Square

(a) 9

(b) 24

(c) 25

(d) 36

41, 43, 47, 53, 61, 71, 83, 75

97

(a) 75

(b) 73

(c) 71

(d) 53

16, 25, 36, 73, 144, 196, 225

(a) 36

☒ (b) 73

(c) 196

(d) 225

1, 4, 9, 16, 19, 36, 49

☒ (a) 19

(b) 9

(c) 49

(d) 16

835, 734, 642, 751, 853, 981, 532
(a) 751 (b) 853

4, 5, 7, 10, 14, 18, 25, 32
(a) 7 (b) 14

52, 51, 48, 43, 34, 27, 16
(a) 27 (b) 34

(c) 981

(d) 532

(c) 18

(d) 33

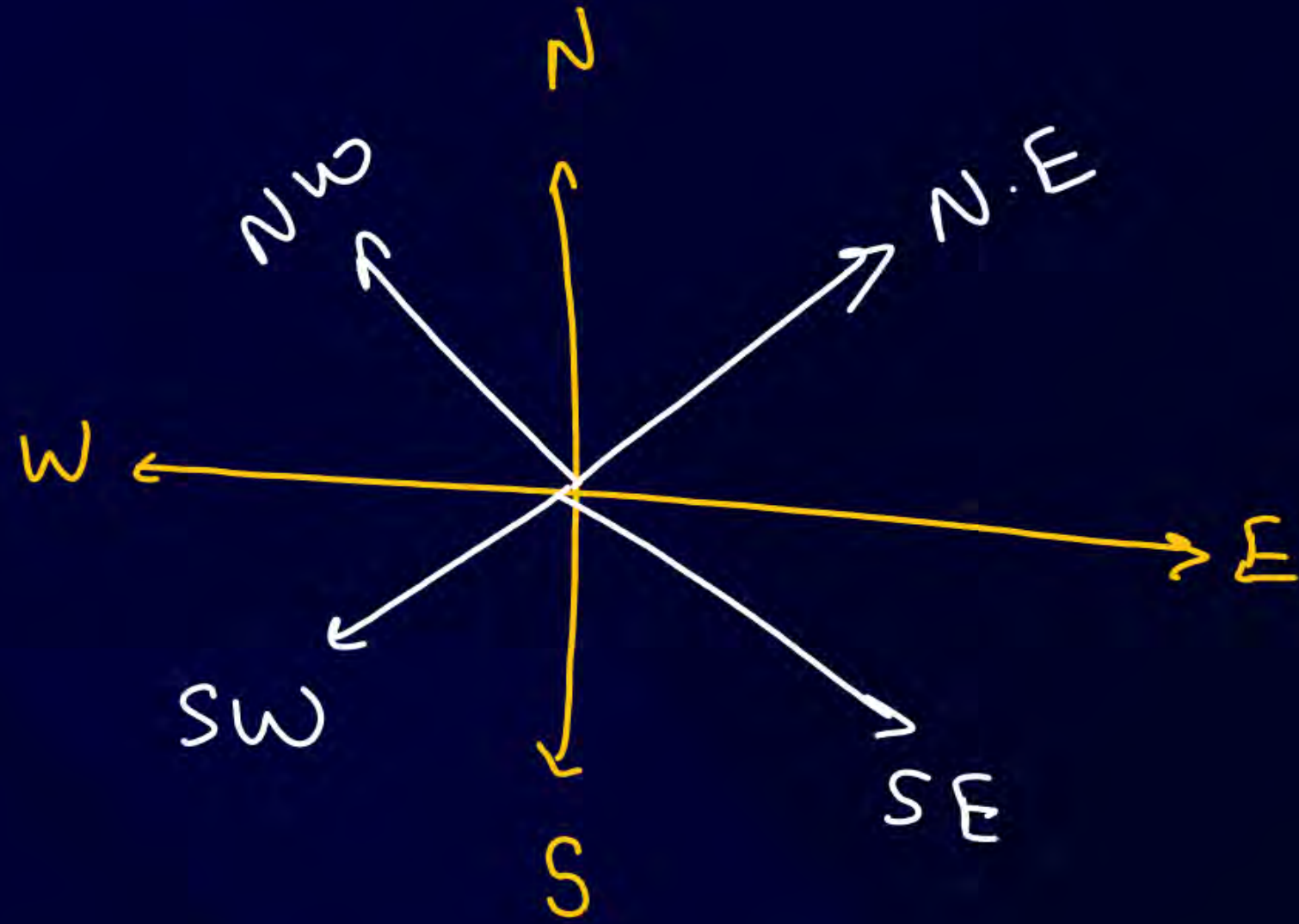
(c) 43

(d) 48



Direction Test



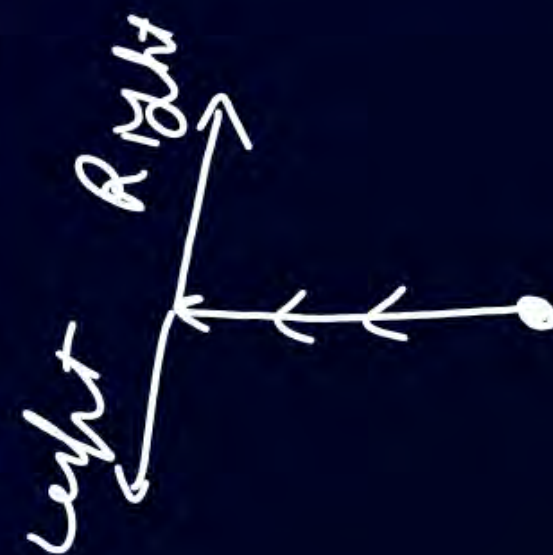
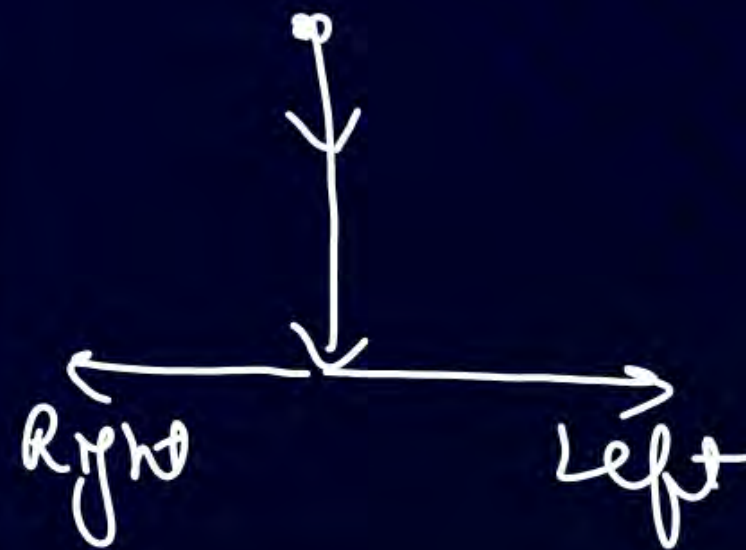
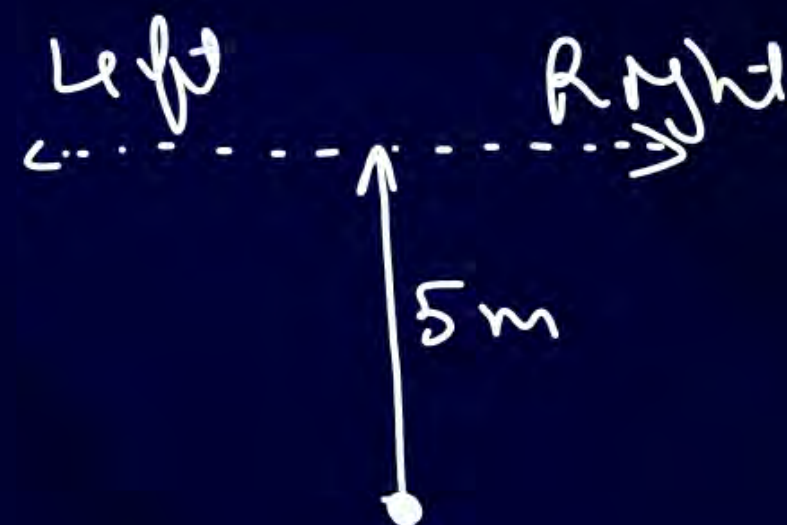
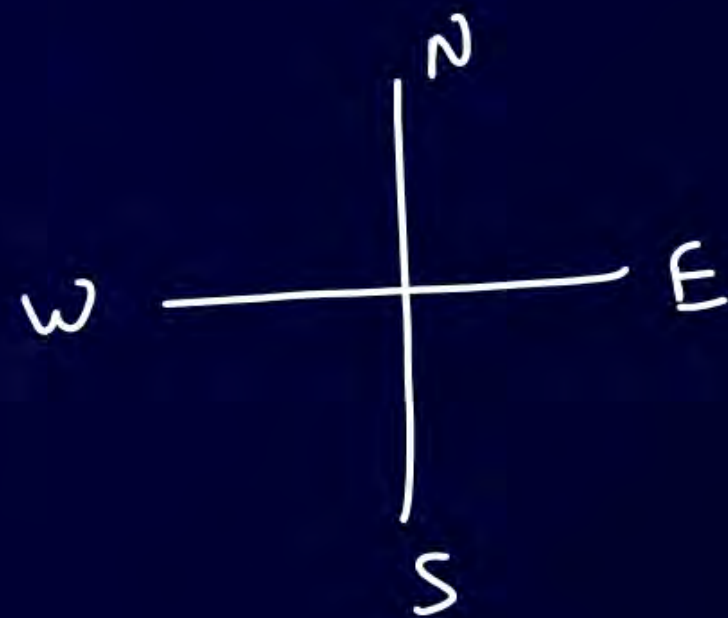


Clockwise



Anticlockwise



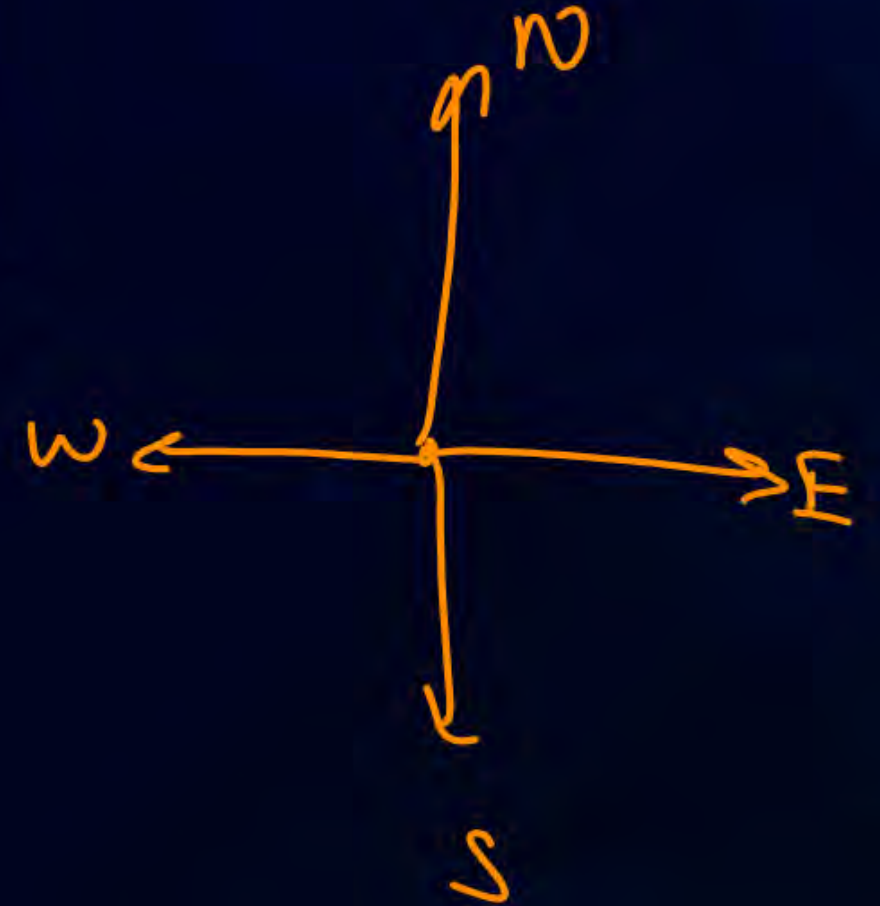
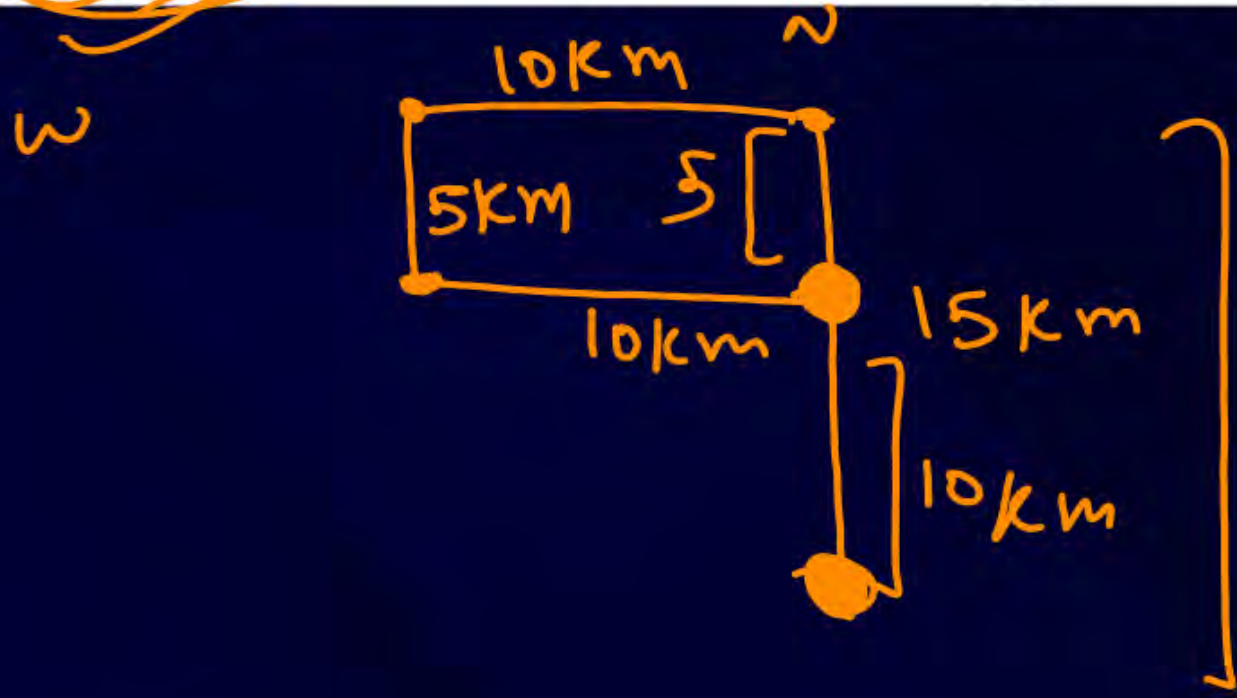


QUESTION

CA

Laxman went 15 km to North then he turned West and covered 10 kms. Then he turned South and covered 5 km. Finally turning to East he covered 10 km. In which direction he is from his house.

- (a) East (b) West
(c) North (d) South (1 mark)



QUESTION

CA

A man is facing East, then he turns left and goes 10 meter then turns right and goes 5 meter then goes 5 meter to the South and from there, 5 meter to West. In which direction is he from his original place?

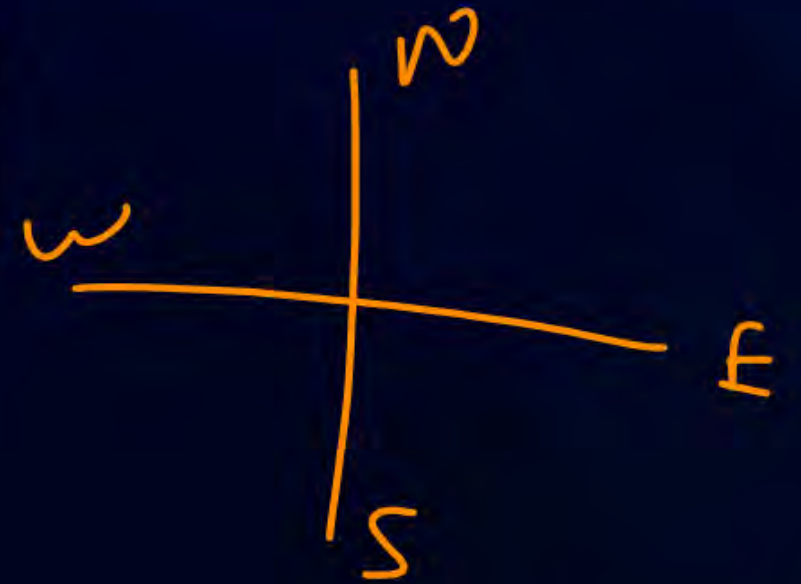
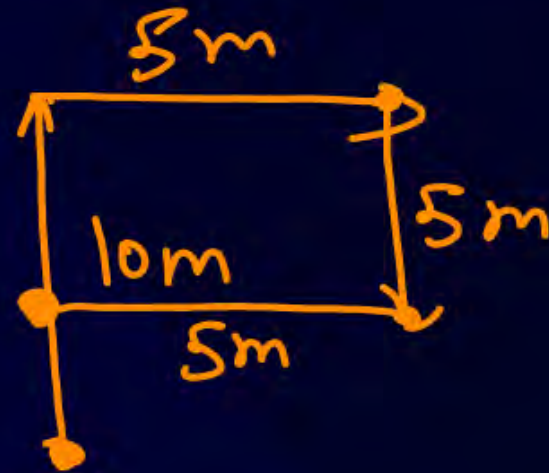
(a) East

(b) West

(c) North

(d) South

(1 mark)



QUESTION

X walks southwards and then turns right, then left and then right. In which direction is he moving now?

- (a) South (b) North
(c) West (d) South-west (1 mark)



QUESTION

CA

I stand with my right hand extended side-ways towards south. Towards which direction will my back be?

(a) North

☒ (b) West

(c) East

(d) South

(1 mark)



QUESTION

CA

You go North, turn right, then right again and then go to the left. In which direction are you now?

(a) South

(c) West

~~(b)~~ East

(d) North

(1 mark)



QUESTION



Anoop Starts walking towards South. After walking 15 metres, he turns towards North. After walking 20 metres, he turns towards East and walks 10 metres. He then turns towards south and walks 5 metres. In which direction is he from the original position.

- (a) North (b) South
(c) East (d) West (1 mark)

N
W + E
S



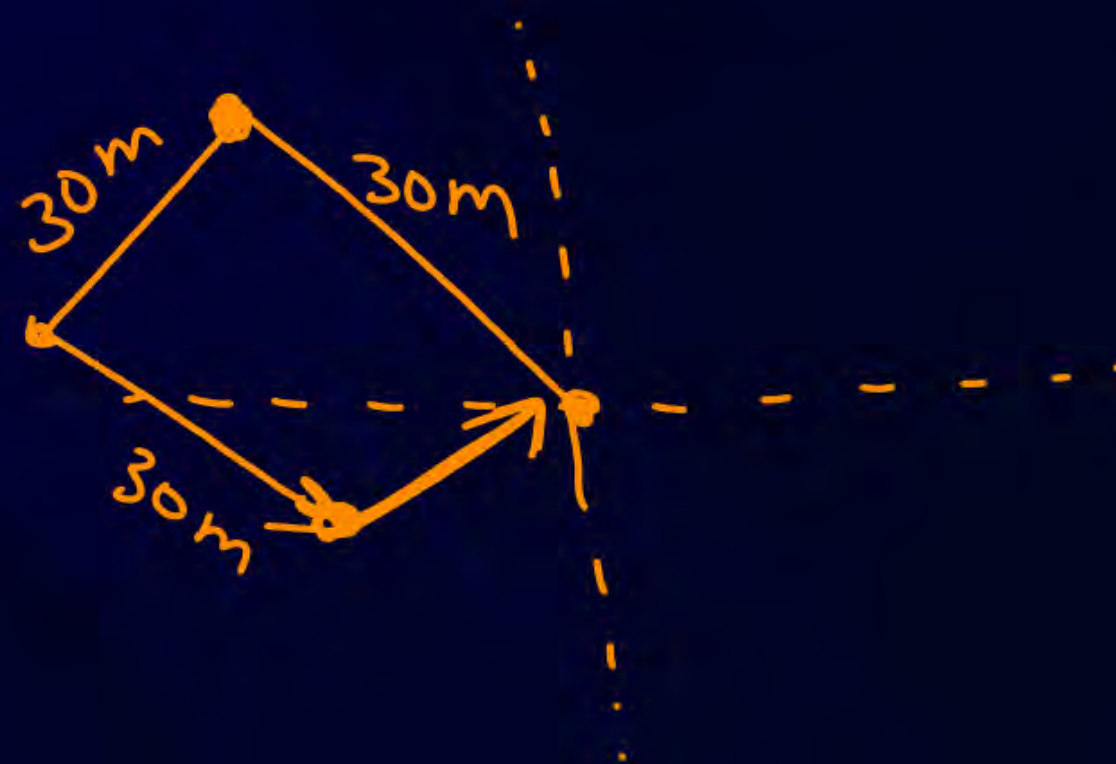
QUESTION



Sangeeta leaves from her home. She first walks 30 meters in north-west direction and then 30m in south west direction, next she walks 30 metres in south-east direction. Finally she turns towards her house. In which direction is she moving now?

- (a) North - West
- (b) North - East
- (c) South - East
- (d) South - West

(1 mark)



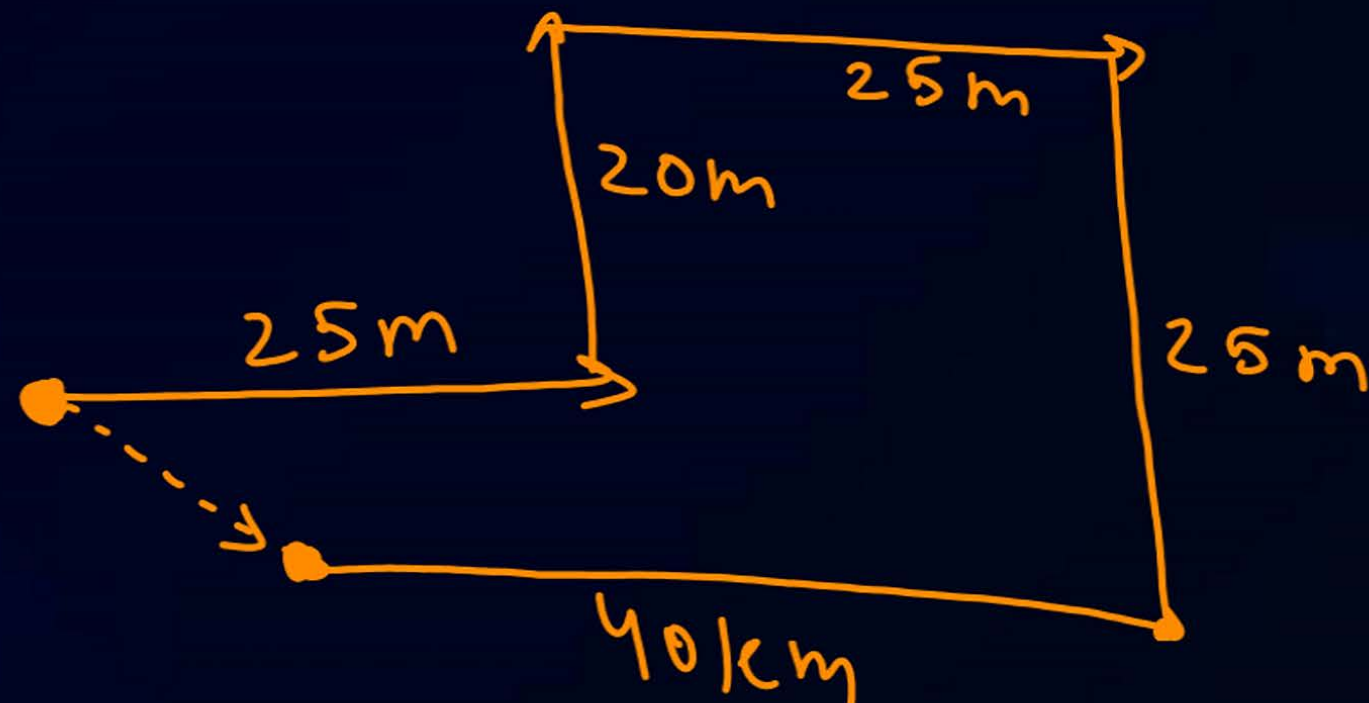
QUESTION



When a person faces north and walks 25m right then turns left and walks 20m, and again turns right and walks 25m, and turns right, and walks 25m, and turns right and walks 40m, in which direction is he now from his starting point?

- (a) North – West
- (b) North – East
- (c) **South – East**
- (d) South – West

(1 mark)



QUESTION



One day, Ram left home and cycled 10 km southward, turned right and cycled 5 km and turned right and cycled 10 km and turned left and cycled 10 km. How many kilometers will he have to cycle to reach his home straight?

- (a) 10
- (b) 15
- (c) 20
- (d) 25

(1 mark)



$$10 + 5 = 15 \text{ km}$$

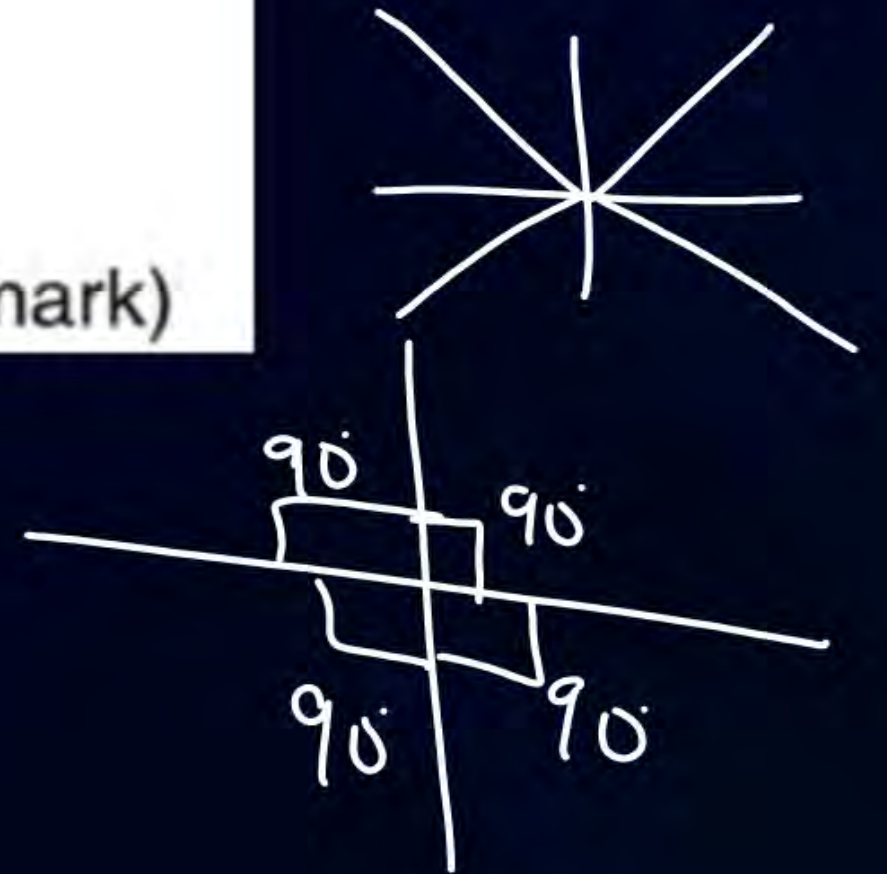
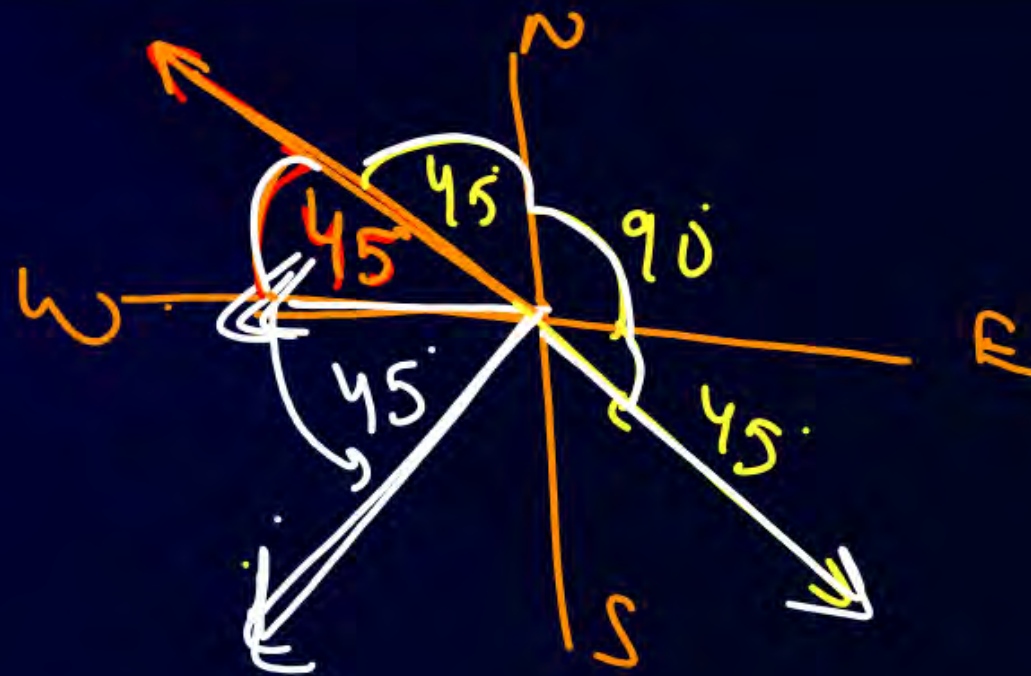
QUESTION

CA

A man is facing west he turns 45 degrees in the clockwise direction and then another 180 degrees in the same direction and then 270 degrees in the anticlockwise direction. Which direction is he facing now?

- (a) South-west
- (b) North-west
- (c) West
- (d) South

(1 mark)

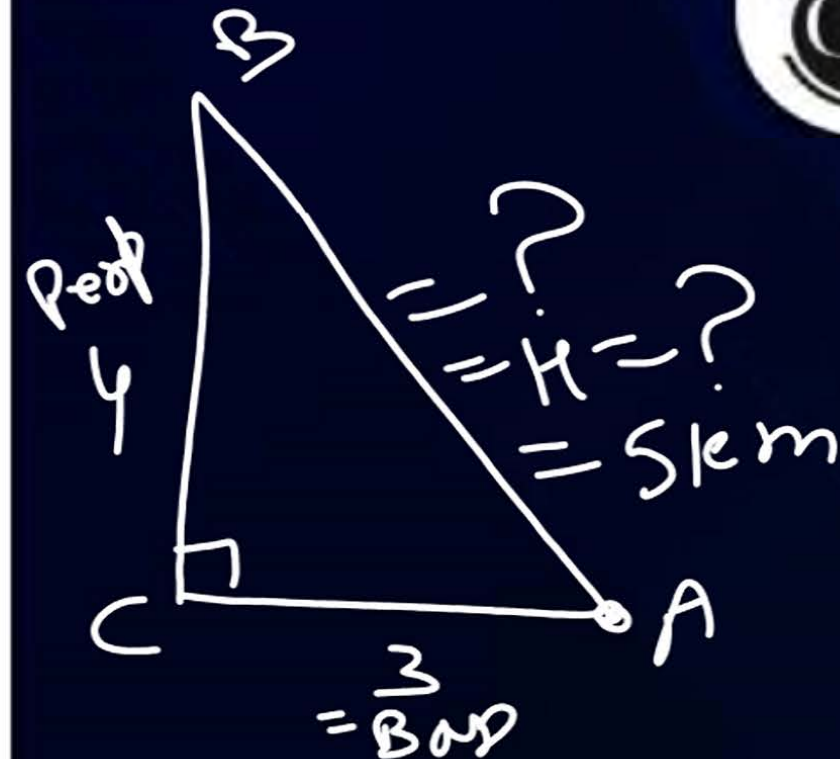


A man can walk by having long, medium and short steps. He can cover 60 meters by 100 long steps, 100 meters by 200 medium steps and 80 meters by 200 short steps, he walks taking 5000 long steps, then he turns left and walk by taking 6000 medium steps. He then turns right and walk by taking 2500 short steps. How far (in meters) is he away from his starting point?

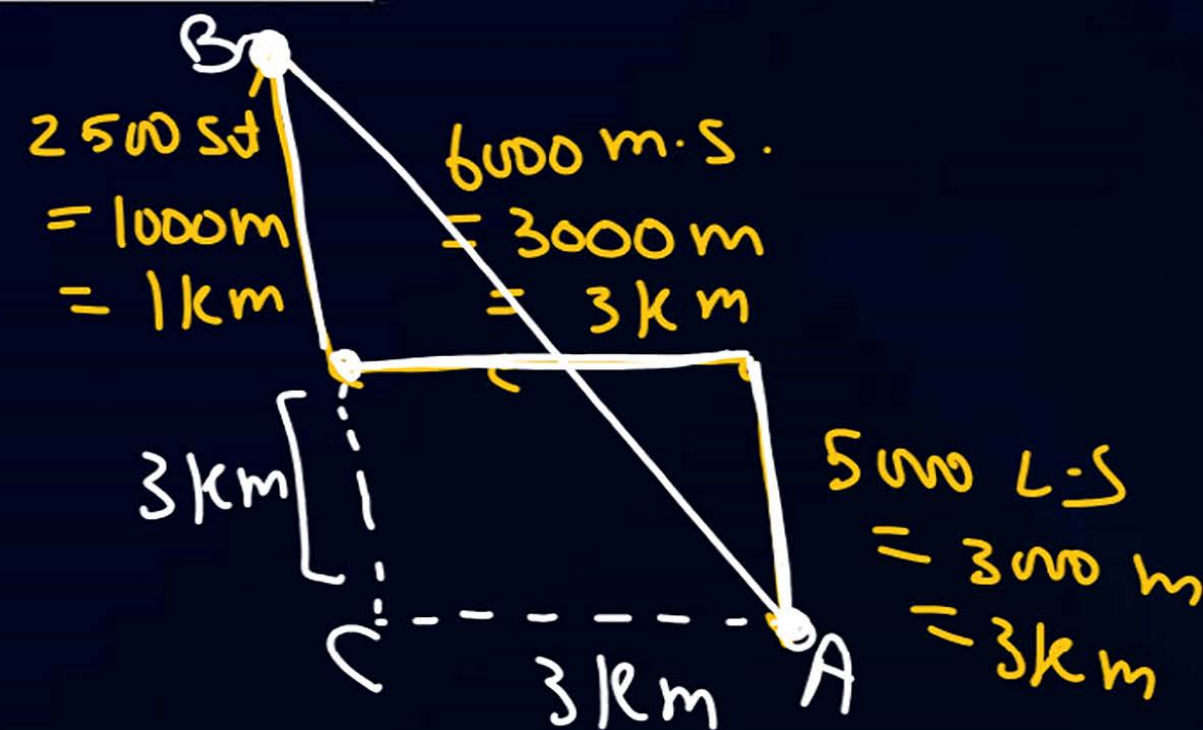
- (a) 5000 m
- (b) 4000 m
- (c) 6000 m
- (d) 7000 m

$$\begin{aligned}
 H^2 &= B^2 + P^2 \\
 &= 3^2 + 4^2 \\
 H^2 &= 25 \\
 \boxed{H} &= \boxed{5}
 \end{aligned}$$

(1 mark)



Long $\Rightarrow 100 \text{ steps} = 60 \text{ m} \Rightarrow 1 \text{ step} = \frac{60}{100} = 0.6 \text{ m}$
 medium $\Rightarrow 200 \text{ steps} = 100 \text{ m} \Rightarrow 1 \text{ step} = 0.5 \text{ m}$
 Short $\Rightarrow 200 \text{ steps} = 80 \text{ m} \Rightarrow 1 \text{ step} = 0.4 \text{ m}$

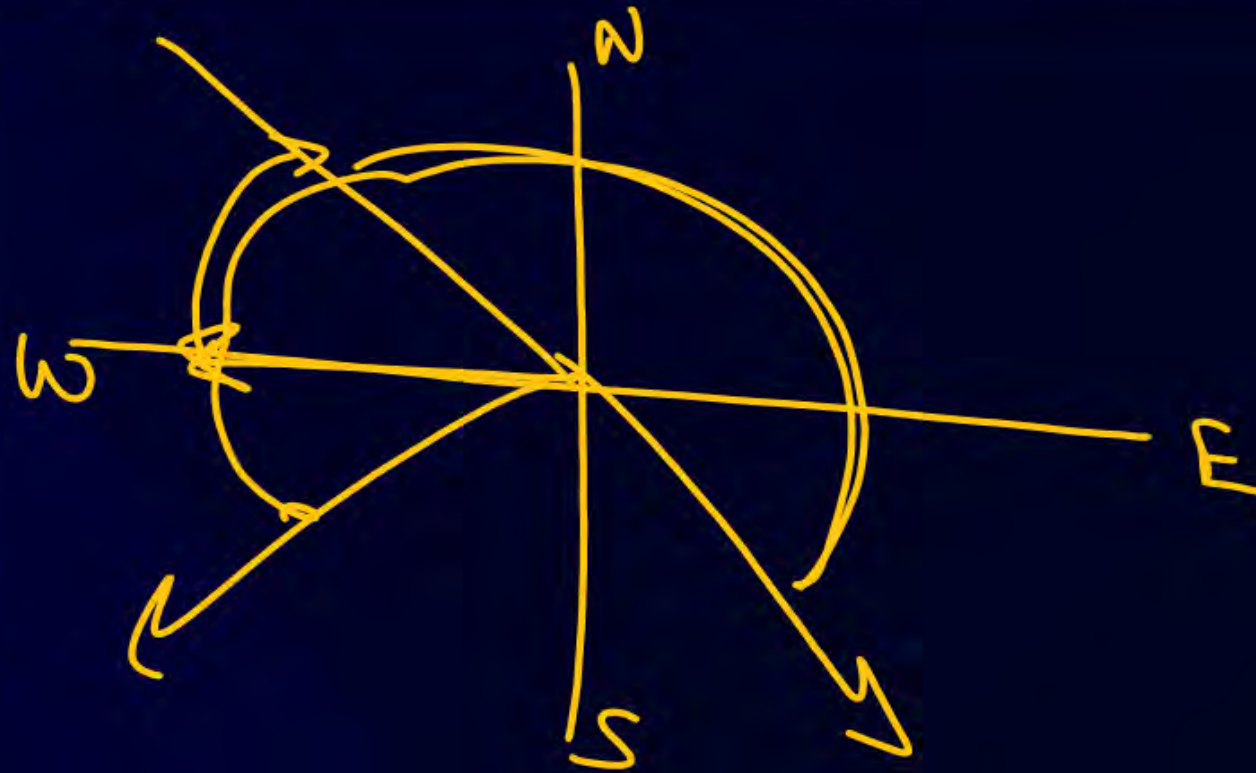


QUESTION

CA

A man is facing west. He turns 45° in the clockwise direction and then another 180° in the same direction and then 270° in the anti-clockwise direction. Which is he facing now?

- (a) South-West
- (b) North-West
- (c) West
- (d) South



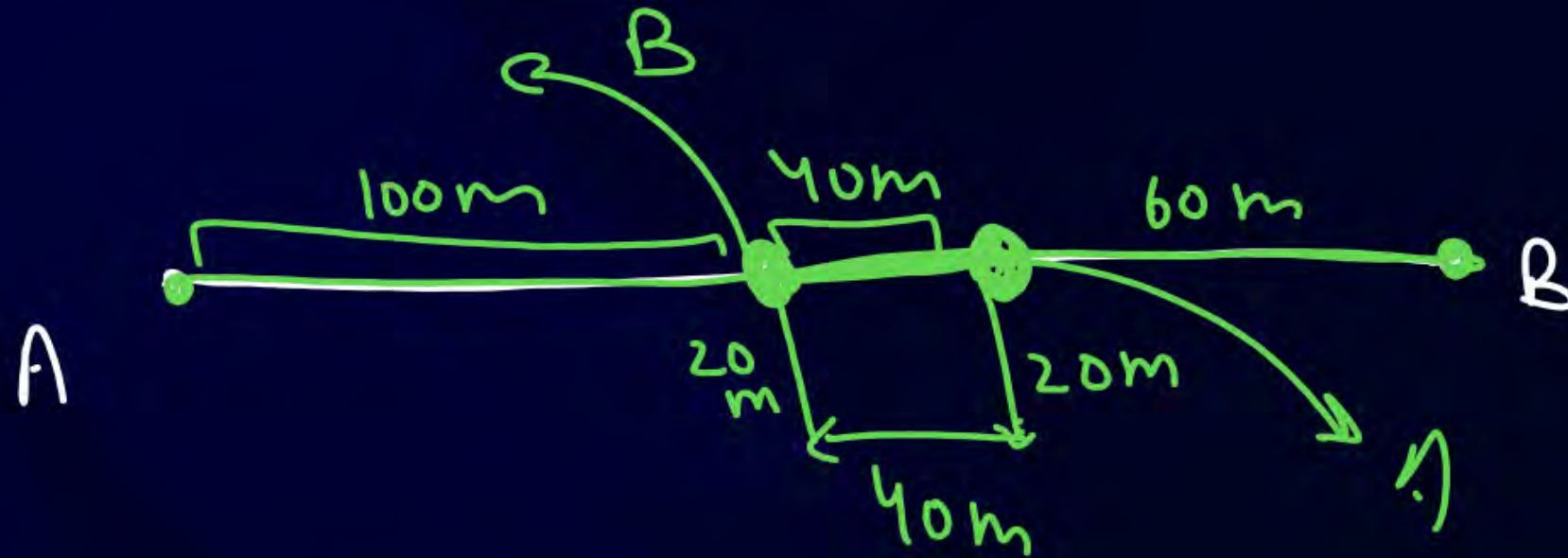
QUESTION



A and B start moving towards each other from two places 200m apart. After walking 60m, B turns left and goes 20m, then he turns right and goes 40 m. He then turns right again and comes back to the road on which he had started walking. If A and B walk with the same speed, what is the distance between them now?

- (a) 80 m
- (b) 70 m
- (c) 40 m
- (d) 60 m

(1 mark)



QUESTION

CA

R's office is 4 km. in East direction from his home and club is 4km. in North direction from his home. On midway from office to club, R starts moving towards his home. In which direction is he facing his back?

- (a) South-East (b) North-West
(c) North-East (d) South-West (1 mark)



5,6

7,7,7



Blood Relation

माता - mother

पिता = father

Dadaji \Rightarrow paternal
Grand father

Dadiji \Rightarrow Grand mother

Chachaji \Rightarrow Uncle

Chachi \Rightarrow Aunt

Nana \Rightarrow maternal
Grand father

Nani \Rightarrow Grand mother

Mamaji \Rightarrow Uncle

Mami \Rightarrow Aunt

पच्चेरे भ्रातृ / बहन \Rightarrow Cousins
(सभेरे)

भ्रातृजा / भ्रातृजा \Rightarrow Nephew
(भ्रातृ का बेटा)

भ्रातृजी / भ्रातृजी \Rightarrow Niece

दामाद \Rightarrow Son in Law

काहु \Rightarrow Daughter in Law

साली \Rightarrow Sister in Law

बूँवर \Rightarrow Brother in Laws

[male = $\boxed{+}$
female = $\boxed{-}$

[same generation \longleftrightarrow

[generation change $\uparrow \downarrow$

[Husband & wife =

A is brother of B
& B is sister of A

$A(+) \longleftrightarrow B(-)$

§ A is son of B but
B is not father of A

Sol.

B(-)

↓

A(+)

§ A is brother of B &
C is wife of B

Sol.

$A(+) \longleftrightarrow B(+) = C(-)$

QUESTION

CA

Vinod introduce Vishal as the son of the only brother of his father's wife.

How is Vinod related to Vishal?

(a) ~~Cousin~~

(b) Brother

(c) Son

(d) Uncle

(1 mark)

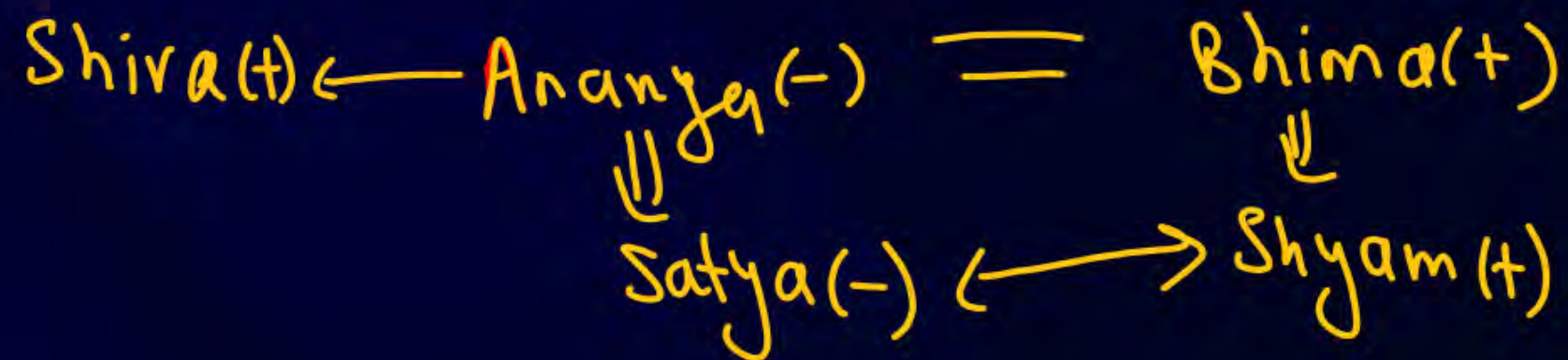
father = wife → Brother
↑
Vinod → Son

QUESTION



Annanya is mother of Satya and Shyam is the son of Bhima. Shiva is brother of Annanya. If Satya is sister of Shyam. How Bhima is related to Shiva?

- (a) Son (b) Cousin
(c) Brother-in-law (d) Son-in-law (1 mark)



QUESTION

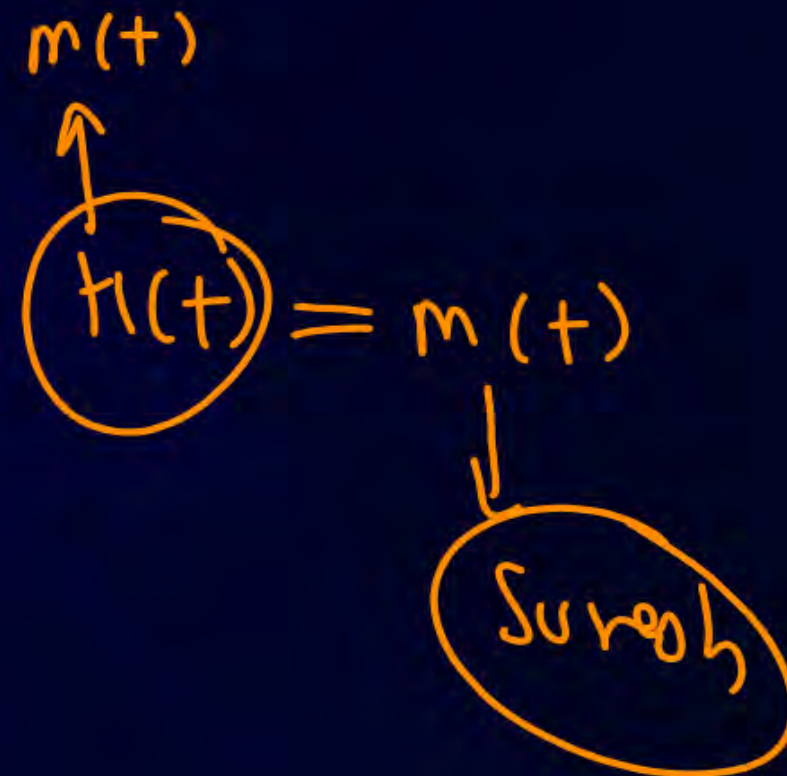
CA

Suresh introduces a man as "he is the son of the woman who is the mother of the husband of my mother". How is Suresh related to the man?

- (a) Brother-in-law
- (c) Brother

- ☒ (b) Son
- (d) Nephew

(1 mark)



QUESTION



A reads a book and find the name of the author familiar. The author 'B' is the paternal uncle of C. C is the daughter of A. How is B related to A?

- (a) Brother
(c) Father

- (b) Sister
(d) Uncle

(1 mark)

(A)
father(+) → B(+)
↑
C(-)

QUESTION

CA

P and Q are brothers R and S are sisters. P's son is R's brother. How is Q related to R?

~~(a) Uncle~~

(b) Brother

(c) Father

(d) Grandfather

(1 mark)

$P(+) \rightarrow Q(+)$

\downarrow

$(+) \rightarrow R(-) \rightarrow S(-)$

QUESTION

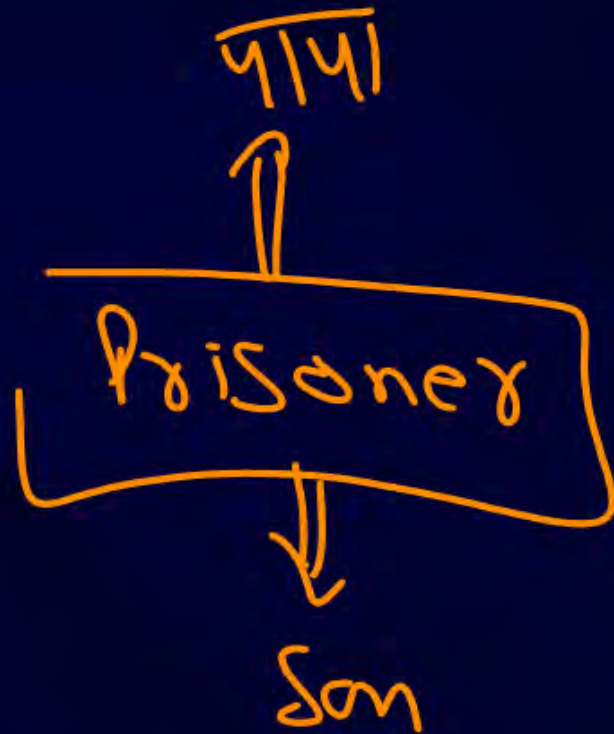
CA

A prisoner introduced a boy who came to visit him to the jailor as "Brothers and sisters I have none, he is my father's son's son". Who is the boy?

- (a) Nephew
- (c) Cousin

- ☒ (b) Son
- (d) Uncle

(1 mark)



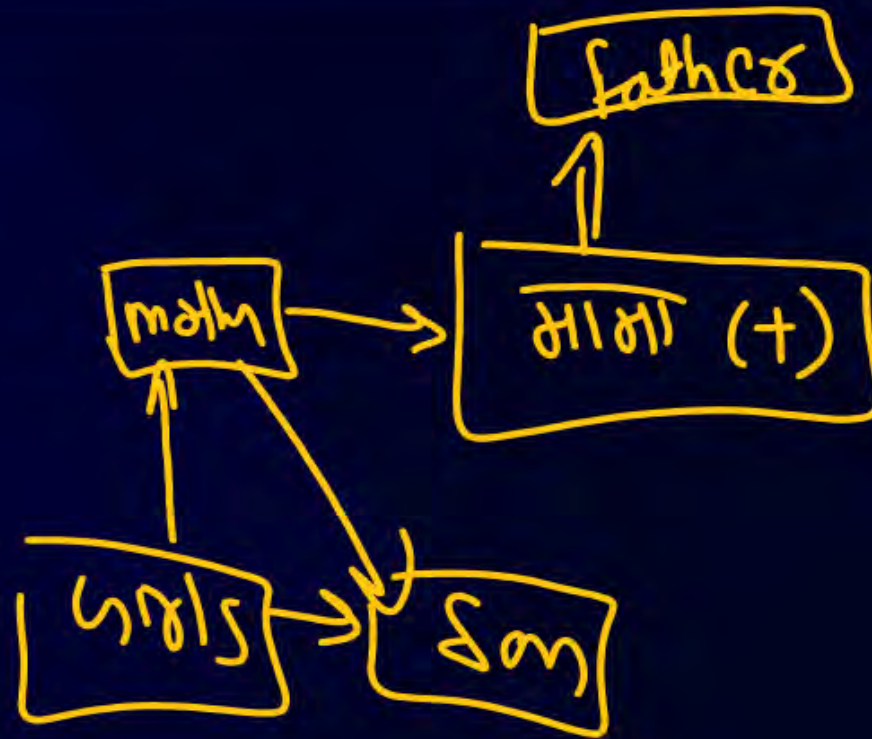
QUESTION

CA

A girl Introduced, a boy as the son of the daughter of father of her uncle. The boy is girl's

- (a) Son
- ☒ (b) Brother
- (c) Son-in-Law
- (d) Uncle

(1 mark)



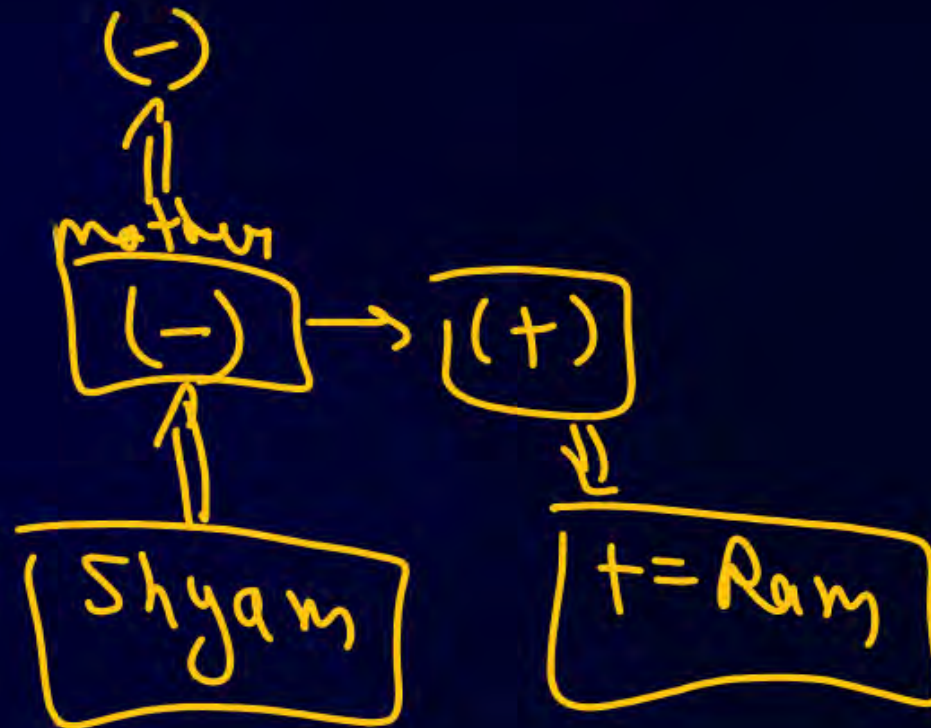
QUESTION

CA

Shyam's mother said to Shyam "My mother has a son whose son is Ram". Shyam is related to Ram as.

- (a) Uncle
- ☒ (b) Cousin
- (c) Nephew
- (d) Grandfather

(1 mark)



QUESTION

CA

If $P + Q$ means P is the mother of Q ; $P \div Q$ means P is the father of Q ; $P - Q$ means P is the sister of Q ; then which of the following relationship shows that M is the daughter of R ?

- (a) $R \div M + N$ (b) $R + N \div M$
 (c) $R - M \div N$ (d) None of the above (1 mark)

$P + Q \Rightarrow P$ is mother of Q
 $P \div Q \Rightarrow P$ is father of Q
 $P - Q \Rightarrow P$ is sister of Q

m is daughter of R

a) $R \div M + N$
 $= R(+)$
 \downarrow
 $M(-)$
 \downarrow
 N

b) $R + N \div M$
 $= R(-)$
 \downarrow
 $N(+)$
 \downarrow
 M

QUESTION

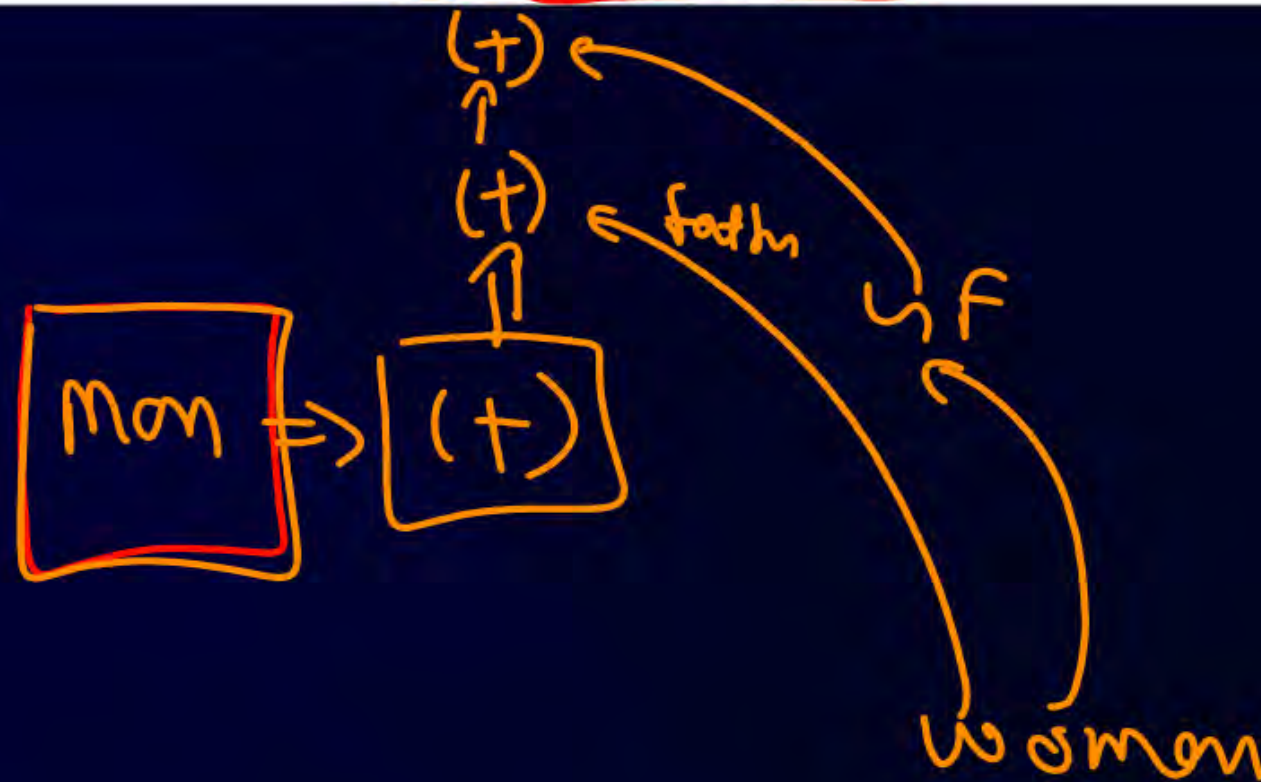
CA

Pointing to a man in a photograph, a woman said, "the father of his brother is the only son of my grandfather", how is the woman related to the man in the photograph?

- (a) Mother
- (c) Daughter

- (b) Aunt
- (d) Sister

(1 mark)



QUESTION



Pointing to a woman in a picture, Sumit said, she is the mother of my son's wife's daughter. How is lady related to the Sumit?

- (a) Uncle
- (b) Cousin
- (c) Daughter
- (d) None

(1 mark)



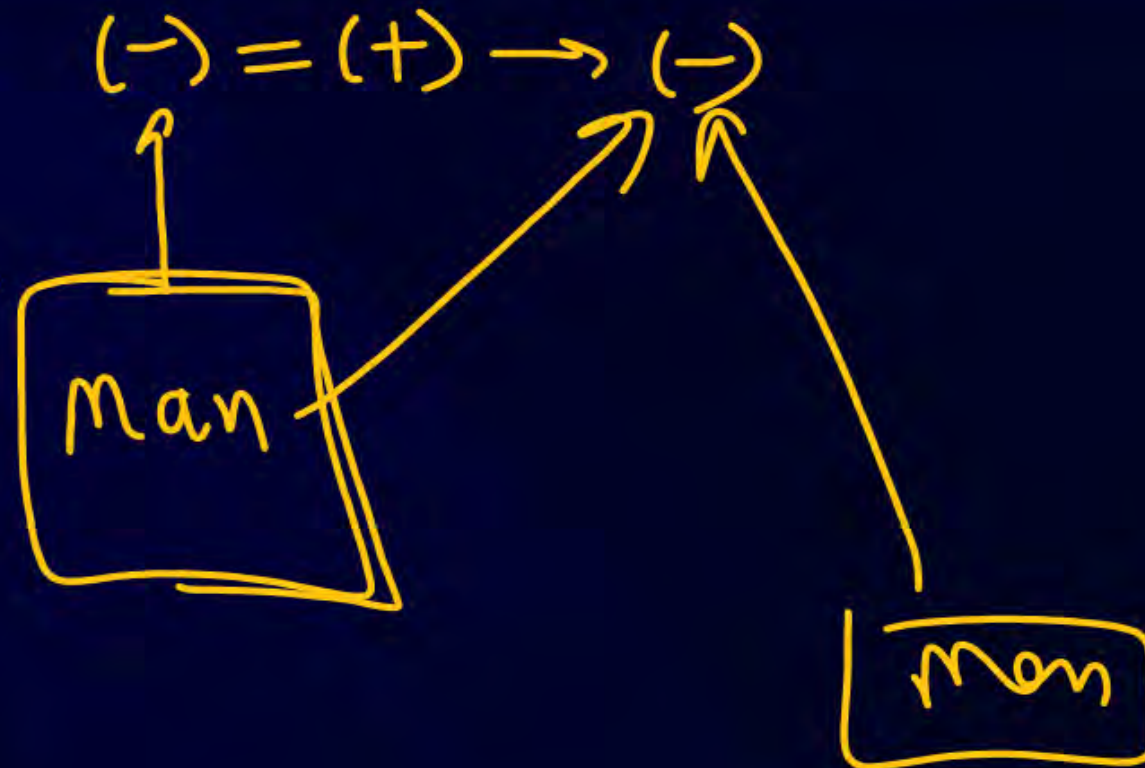
QUESTION

CA

Pointing to a man in a photograph, a man said "His mother's husband's sister is my aunt". Then what is relation between that man and him?

- (a) Son
- (b) Uncle
- (c) Nephew
- (d) Brother

(1 mark)



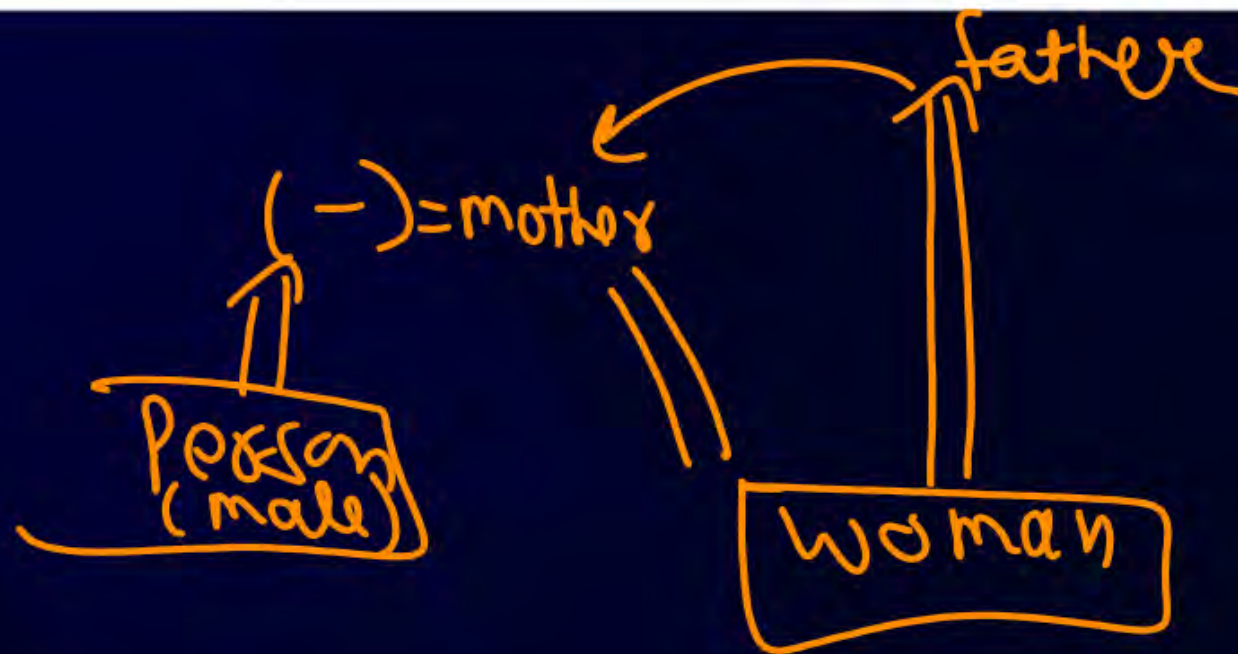
QUESTION

CA

Pointing towards a person, A man said to woman, "His mother is the only daughter of your father". How is the woman related to that person?

- (a) Mother
- (b) Daughter
- (c) Sister
- (d) Wife

(1 mark)



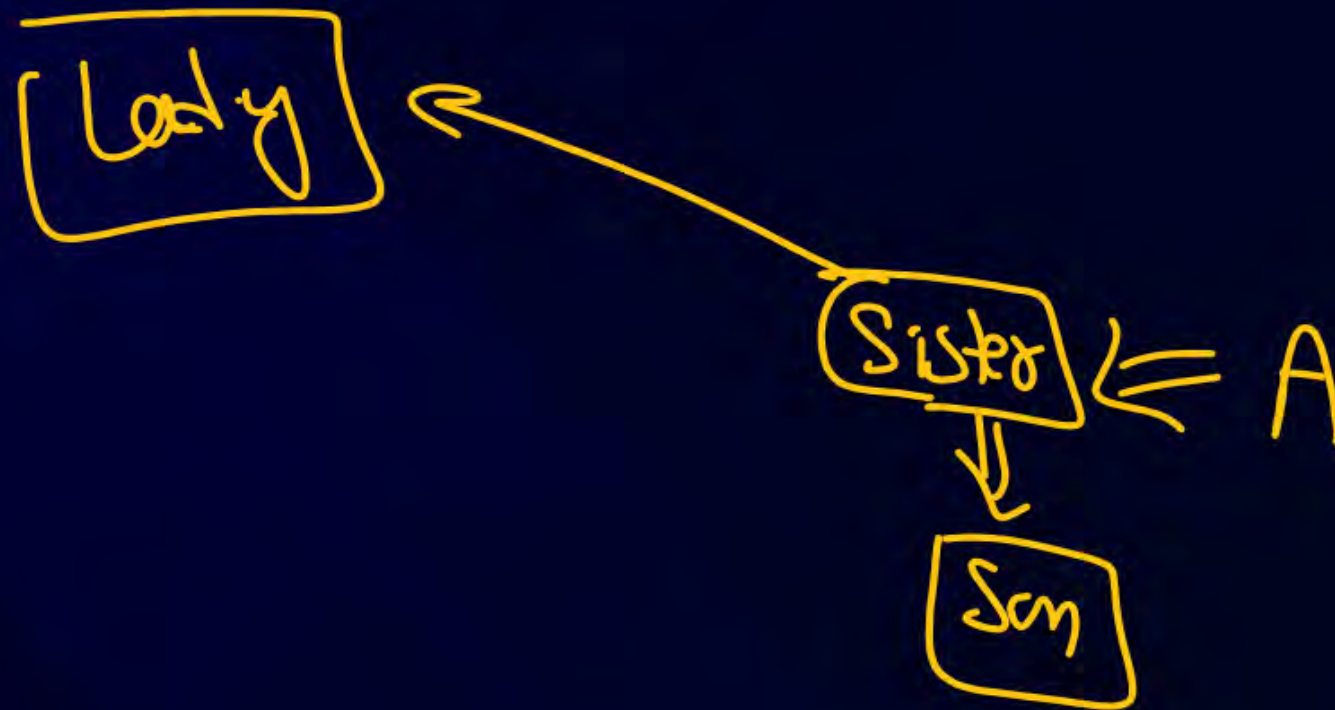
QUESTION

CA

Pointing to a lady, A said, "that women is my nephew's maternal grandmother". How is that women related to A's sister who has no sister?

- (a) Cousin
- (b) Son-in-law
- (c) Mother
- (d) Mother-in-law

(1 mark)



QUESTION

CA

$P + Q$ means P is brother of Q , $P - Q$ means P is the mother of Q . $P \times Q$ means P is the sister of Q . Which of the following means M is the maternal uncle of R ?

- (a) $M + K + R$ ✗ (b) $M - R + K$
 (c) $M + K - R$ (d) $M + K \times R$ (1 mark)

$P + Q \Rightarrow P$ is brother of Q

$P - Q \Rightarrow P$ is mother of Q

$P \times Q \Rightarrow P$ is sister of Q

$(-)$ \rightarrow $(m)(+)$
 \uparrow
 R

a) $\underbrace{m + k + R}_{m(+)} \rightarrow k(+)$ $\rightarrow R$

b) $\underbrace{m - R + k}_{m(-)} \rightarrow R(+)$ $\rightarrow k$

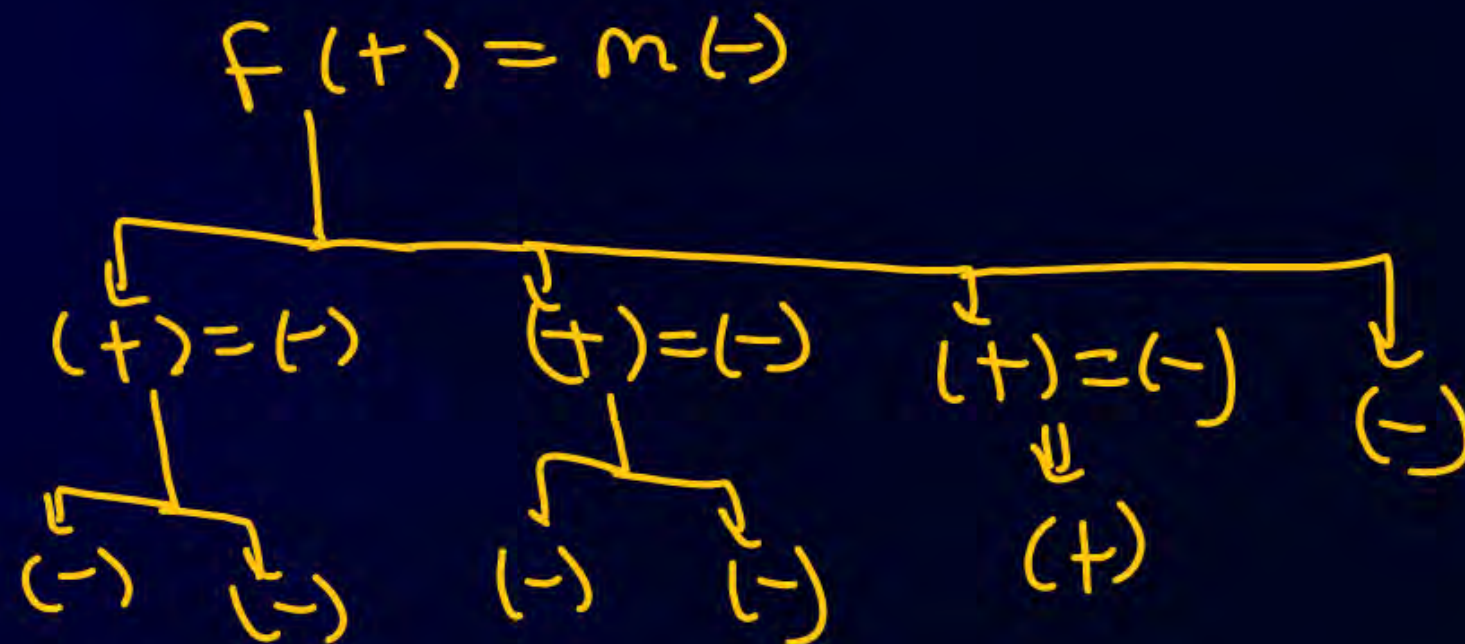
iii) $m + k - R$
 $= m(+)$ $\rightarrow k(-)$
 \downarrow
 R

QUESTION

CA

In a joint family, there are father, mother, 3 married sons and one unmarried daughter. Out of the sons, two have 2 daughters each and one has a son only. How many female members are there in the family?

- (a) 3 (b) 6
(c) 9 (d) 5 (1 mark)



QUESTION

CA

A % B means A is the wife of B, A # B means A is the brother of B, A * B means A is the son of B.

Which of the following expression indicates that P is the son of R?

~~1.~~ U % P # R * S

~~2.~~ S # R * P % U

~~3.~~ U % P # S * R

4. S # R * U % P

$A \% B = A \text{ is wife of } B$

$A \# B = A \text{ is brother of } B$

$A * B = A \text{ is son of } B$

\downarrow
P(+)

ii) $S \# R * P \% U$

$S(+) \rightarrow \downarrow P \rightarrow R(+)$

iii) $U \% P \# S * R$

$U(-) = P(+) = \downarrow R \rightarrow S(+)$

i) $U \% P \# R * S$
 $U(-) = P(+) = R$

QUESTION



Consider the following:

A+B means A is the son of B

A-B means A is the wife of B

What does the expression P+R-Q mean?

1. Q is the son of P

X

2. Q is the wife of P

X

3. Q is the father of P

✓✓

4. None of the above

$$\underbrace{P + R} - Q$$

$$\begin{array}{c} R(-) = Q(+) \\ \downarrow \\ P(+) \end{array}$$

QUESTION



It is 3'o clock in a watch. If the minute hand points towards the North-East then the hour hand will point towards the:

- (a) South
- (b) South – West
- (c) North– West
- (d) South – East

(1 mark)

QUESTION



Daily in the morning the shadow of a Clock Tower installed on Railway Station falls on high rise Mall and in the evening the shadow of the same Mall falls on the Clock Tower installed on Railway Station exactly. So in which direction is Clock Tower to Mall?

- | | | |
|-------------------|-------------------|----------|
| (a) Eastern side | (b) Western side | |
| (c) Northern Side | (d) Southern side | (1 mark) |



THANK YOU



Seating Arrangement



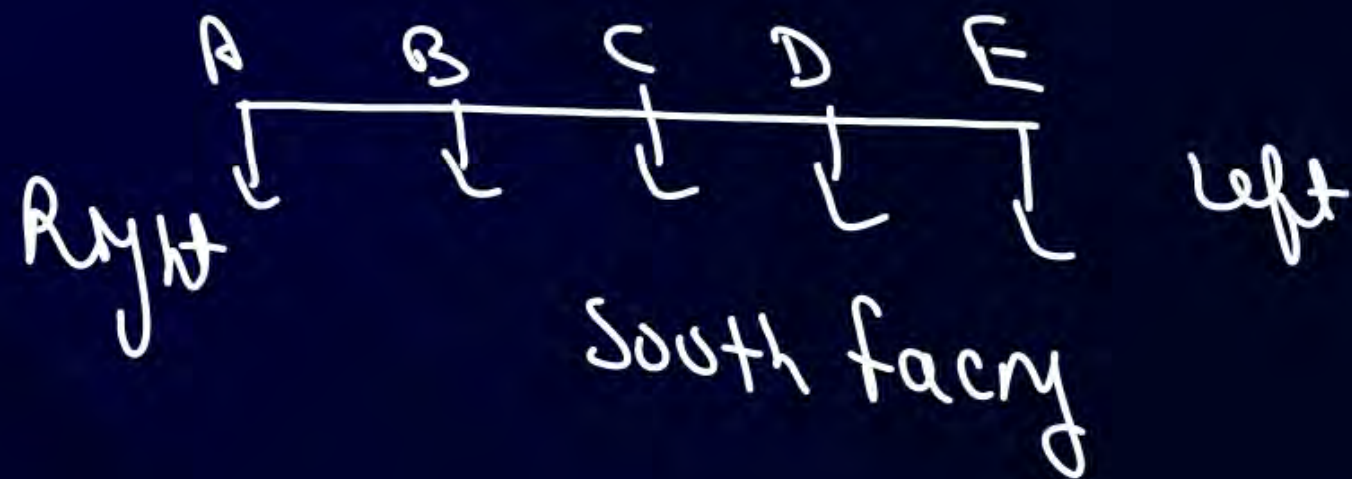
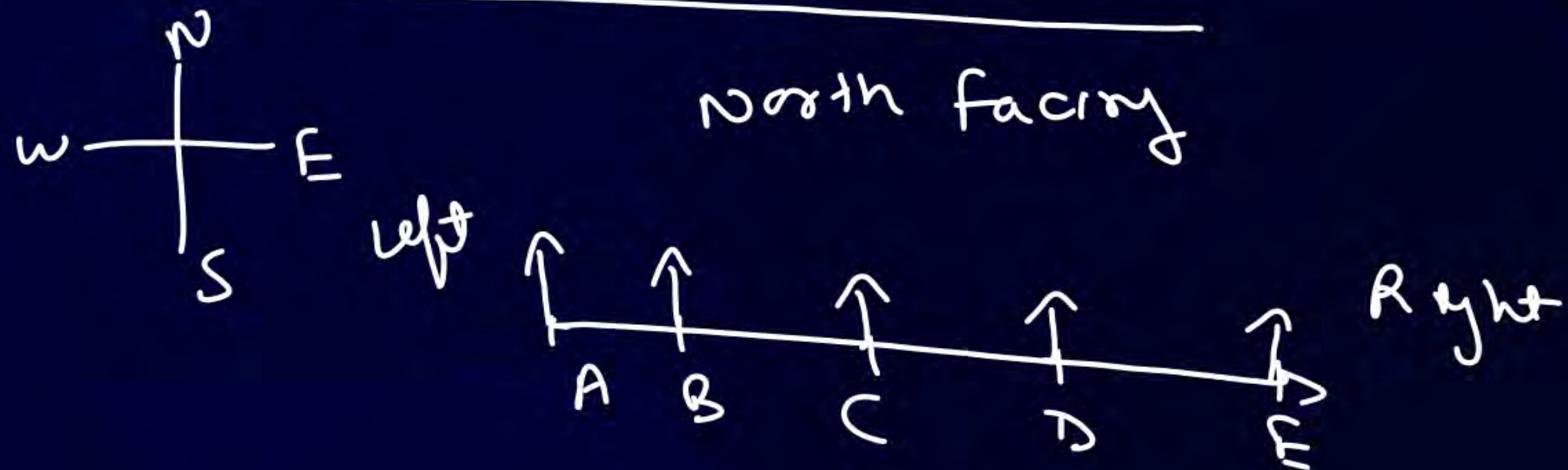
Linear



Circular

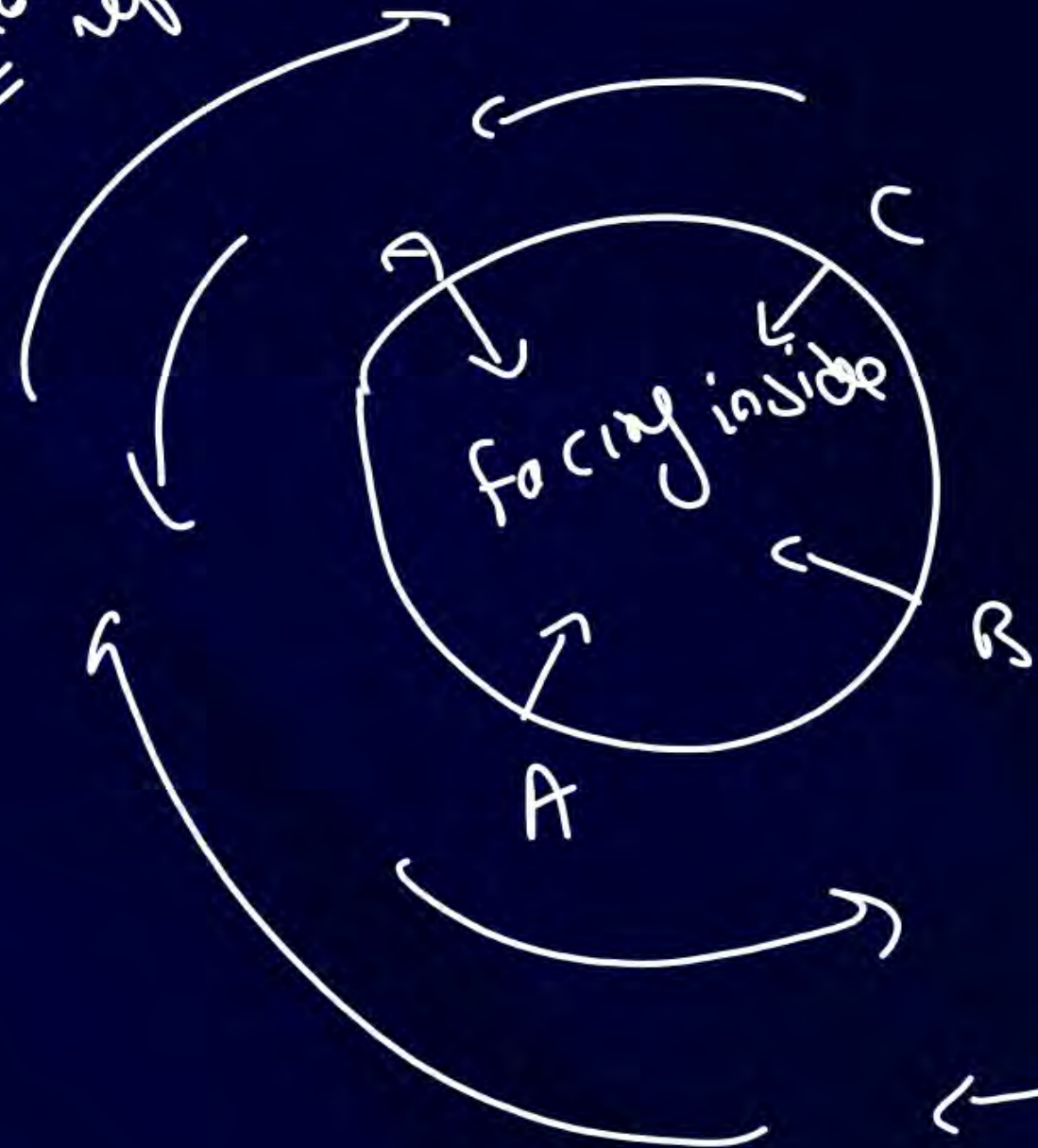


Linear Arrangement

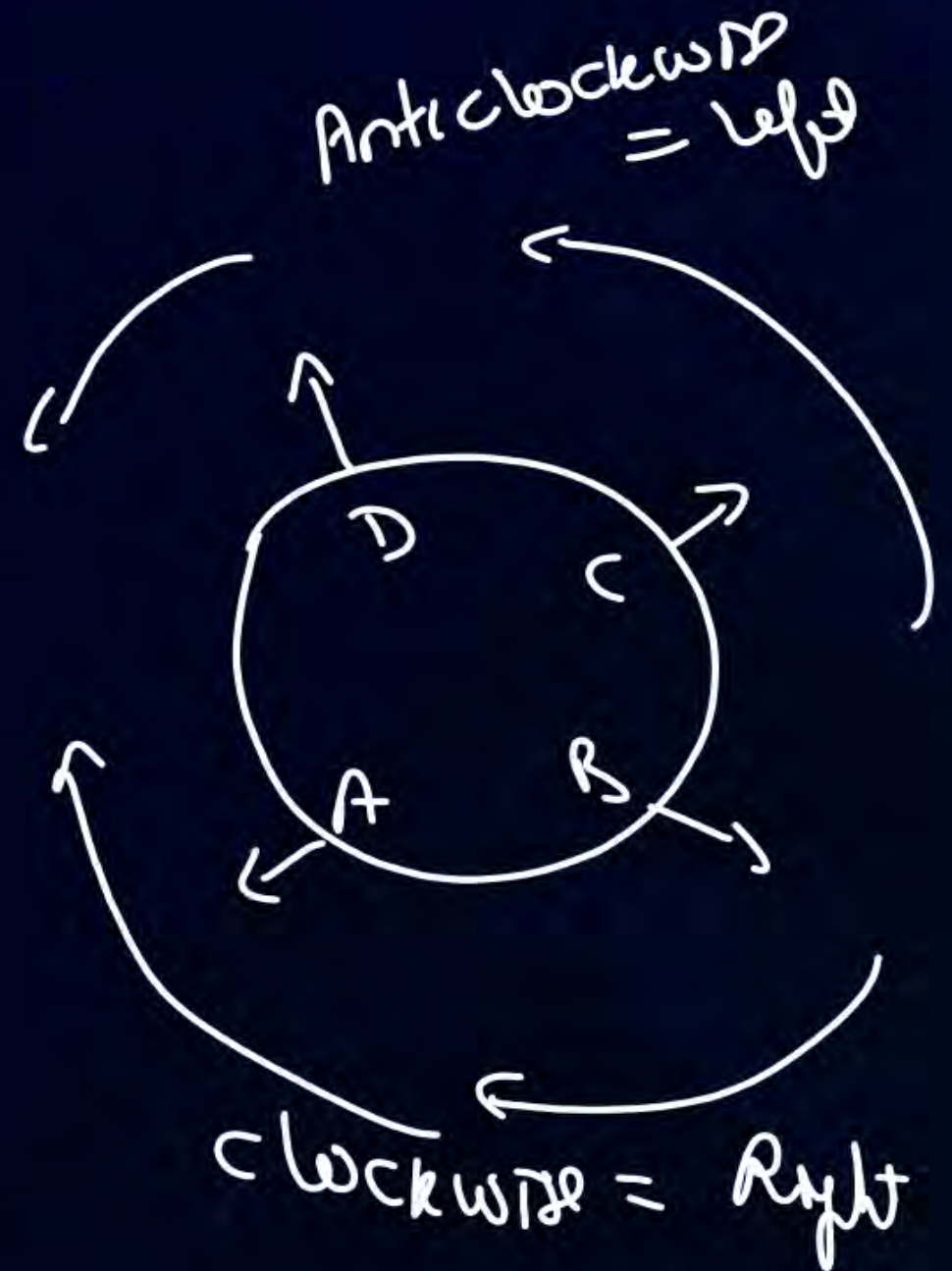


Circular Arrangement

clockwise
= left



Anticlockwise
= Right



QUESTION

CA

Five boys A, B, C, D and E are sitting in a row. A is to the right of B and E is to the left of B but to the right of C. A is to the left of D. Who is second from the left end?

(a) D

(b) A

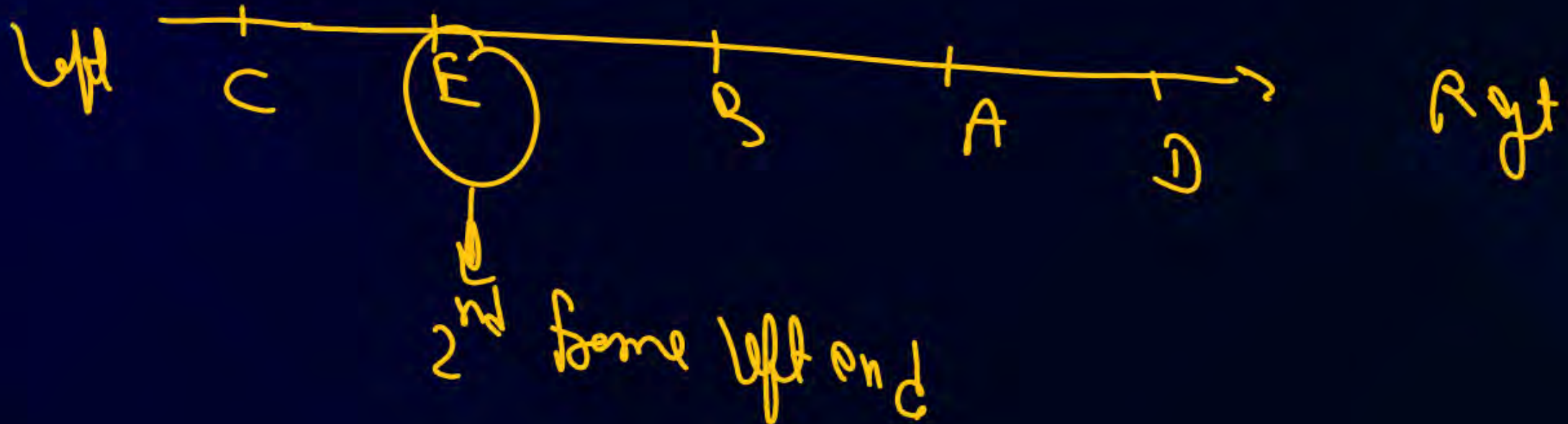
(c) E

(d) B

(1 mark)

A, B, C, D & E

North



QUESTION

CA

Five senior citizens are living in a multi-storeyed building. Mr. Manu lives in a flat above Mr. Ashokan, Mr. Lokesh in a flat below Mr. Gaurav, Mr. Ashokan lives in a flat above Mr. Gaurav and Mr. Rakesh lives in a flat below Mr. Lokesh. Who lives in the topmost flat?

(a) Mr. Lokesh

(b) Mr. Gaurav

(c) Mr. Manu

(d) Mr. Rakesh

(1 mark)

M
↓
A

S
↓
L

A
↓
S

L
↓
R

M
↓
A
↓
S
↓
L
↓
R

QUESTION

CA

Six children A, B, C, D, E and F are standing in a row. B is between F and D. E is between A and C. A does not stand next to F or D. C does not stand next to D. F is between which of the following pairs of children?

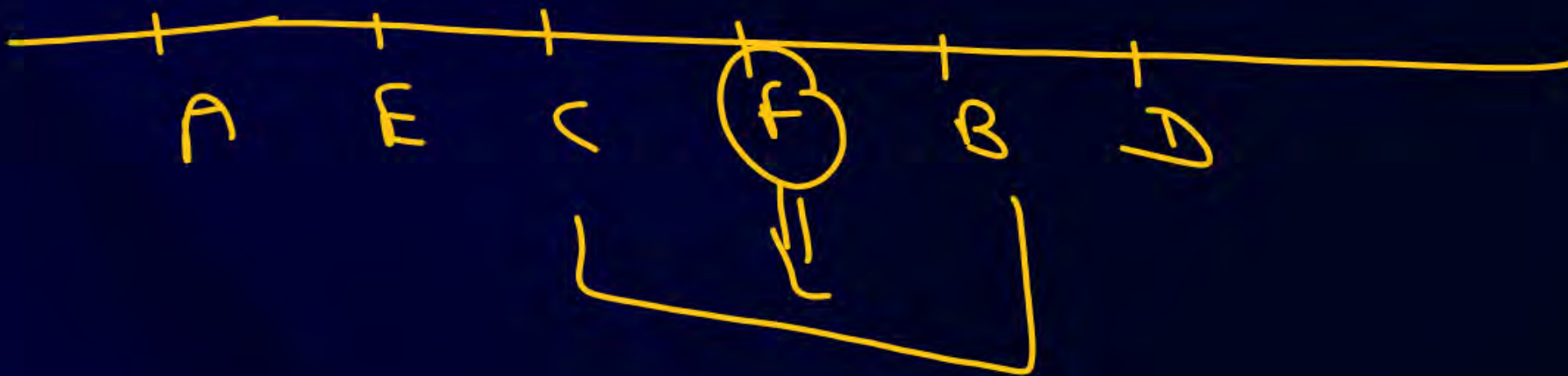
(a) B and E

(c) B and D

☒ (b) B and C

(d) B and A

(1 mark)



QUESTION



Five children are sitting in a row. S is sitting next to P but not T. K is sitting next to R, who is sitting on the extreme left and T is not sitting next to K. Who is/are adjacent to S.

- (a) K+P (b) R+P
(c) Only P (d) P and T. (1 mark)



QUESTION

CA

Eight persons A, B, C, D, E, F, G and H are sitting in a line. E sits second right to D. H sits fourth left to D. C and F are immediate neighbours, but C is not immediate neighbour of A. G is not neighbour of E. Only two persons sit between A and E. The persons on left end and right end respectively are

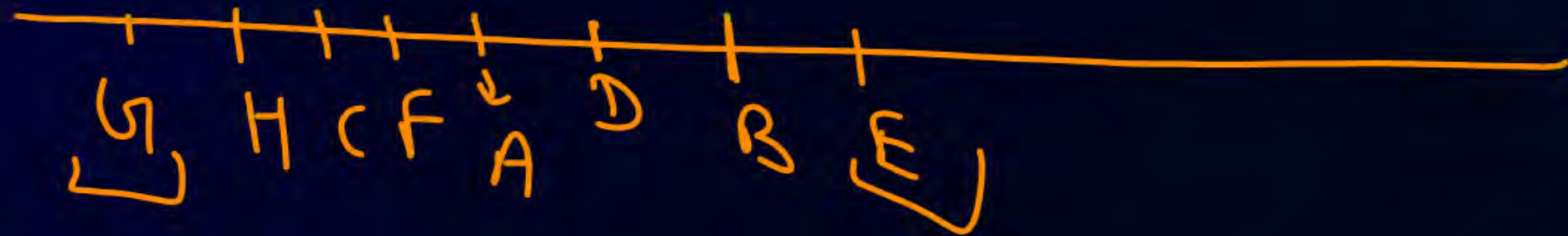
(a) G and E

(b) B and E

(c) H and E

(d) G and B

✓ A, B, C, D, E, F, G, H



QUESTION

CA

Six flats on a floor in two rows facing North and South are allotted to P, Q, R, S, T and U. Q gets a North facing flat and it is not next to S. S and U get diagonally opposite flat. R next to U gets a South facing flat and T gets a North facing flat. Whose flat is between Q and S?

- (a) T

(b) U

(c) R

(d) P

P Q R S T U

North



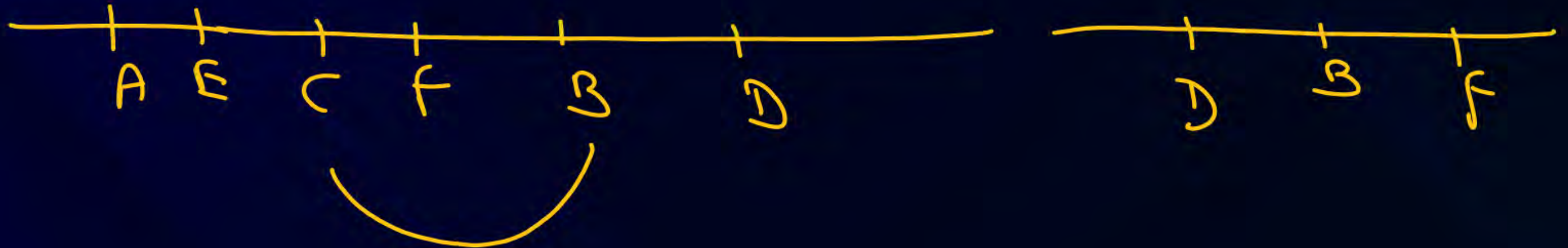
South

QUESTION



In a straight line, there are six persons sitting in a row. B is between F and D. E is between A and C. A does not stand next to F or D, C does not stand next to D. F is between which of the following persons?

- (a) B and E
- (b) B and C
- (c) B and D
- (d) B and A

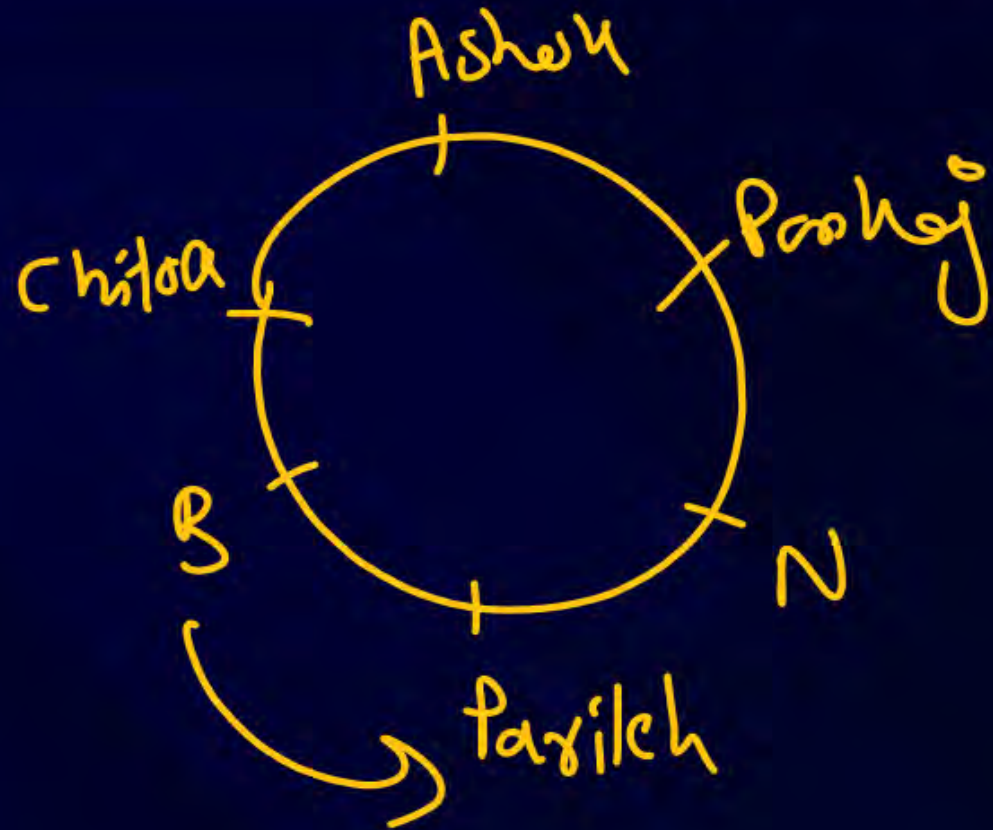


QUESTION



Six person are sitting in a circle facing the center. Parikh is between Bablu and Narender; Ashok is between Chitra and Pankaj. Chitra is on the immediate left of Bablu. Who is on the immediate right of Bablu?

- (a) Parikh (b) Pankaj
(c) Narender (d) Chitra (1 mark)



QUESTION

CA

Eight friends I, J, K, L, M, N, O and P are sitting in a circle facing the centre. J is sitting between O and L; P is third to the left of J and second to the right of I; K is sitting between I and O; J & M are not sitting opposite to each other which of the following statements is not correct?

- (a) K is sitting third to the right of L ✓
- (b) I is sitting between K and N ✓
- (c) L and I are sitting opposite to each other ✓
- (d) M is sitting between N and L. ✗

O J L
I K O



QUESTION

CA

A is seated between D and F at a round table. C is seated opposite to D. E is round adjust to D. Who sit opposite to B?

(a) A

(b) D

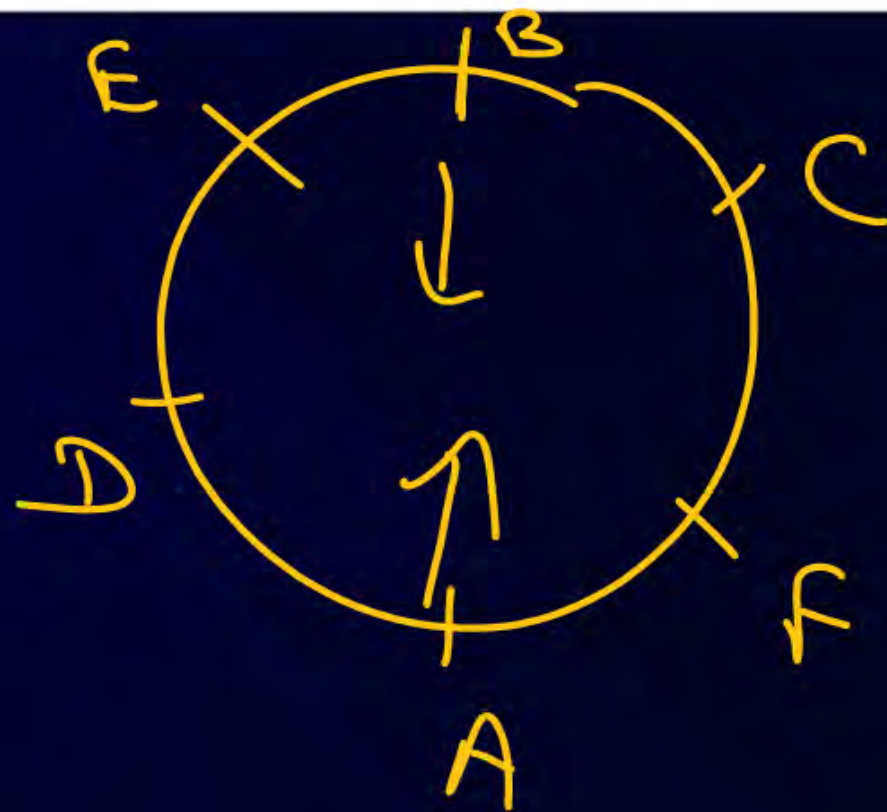
(c) C

(d) F

✓ A (B) C D (E) F

(1 mark)

Sol.



QUESTION

CA

Four ladies A, B, C and D and four Gentlemen E, F, G and H are sitting in a circle around a table facing each other.

I. No two ladies or gentleman are sitting side by side.

II. C, who is sitting between G and E, is facing D.

III. F is between D and A facing G.

IV. H is to the right of B.

Who is immediate neighbour of B?

(a) G and H

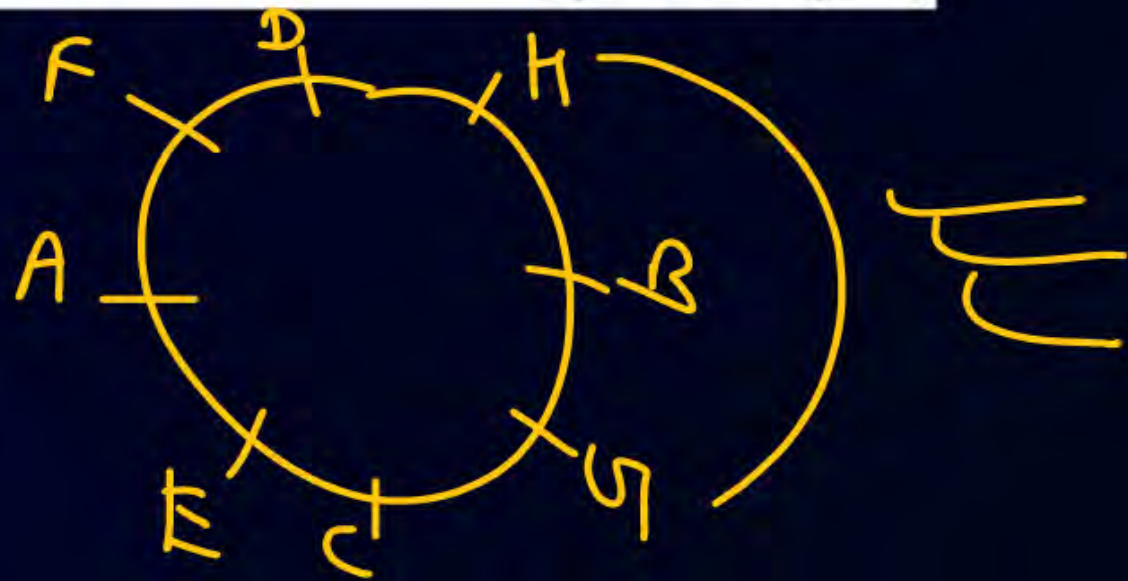
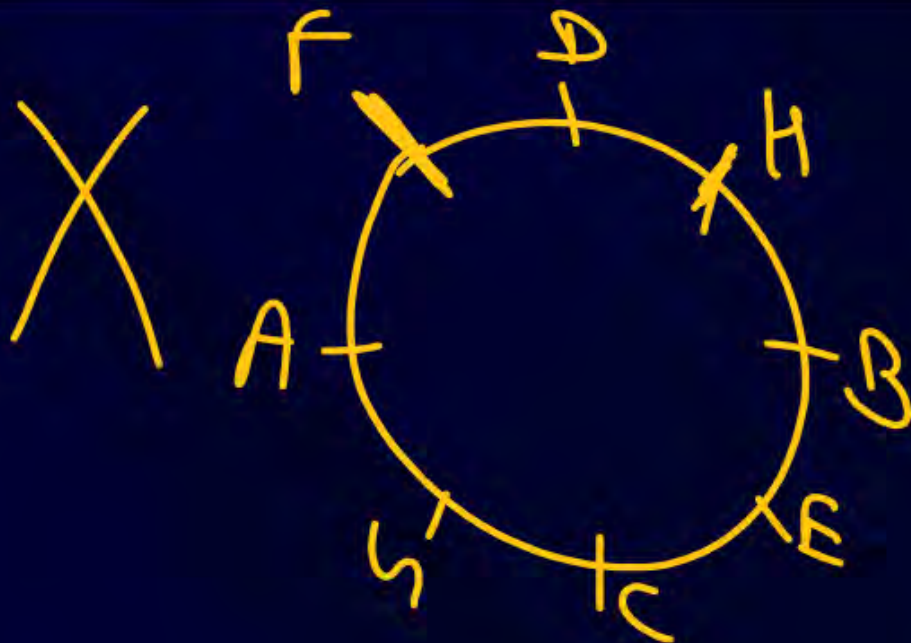
(b) E and F

(c) E and G

(d) A and B

Ladies: A, B, C & D
Gentls: E, F, G & H

(1 mark)



QUESTION

CA

In a line, P is sitting 13th from left. Q is sitting 24th from the right and 3rd left from P. How many people are sitting in the line?

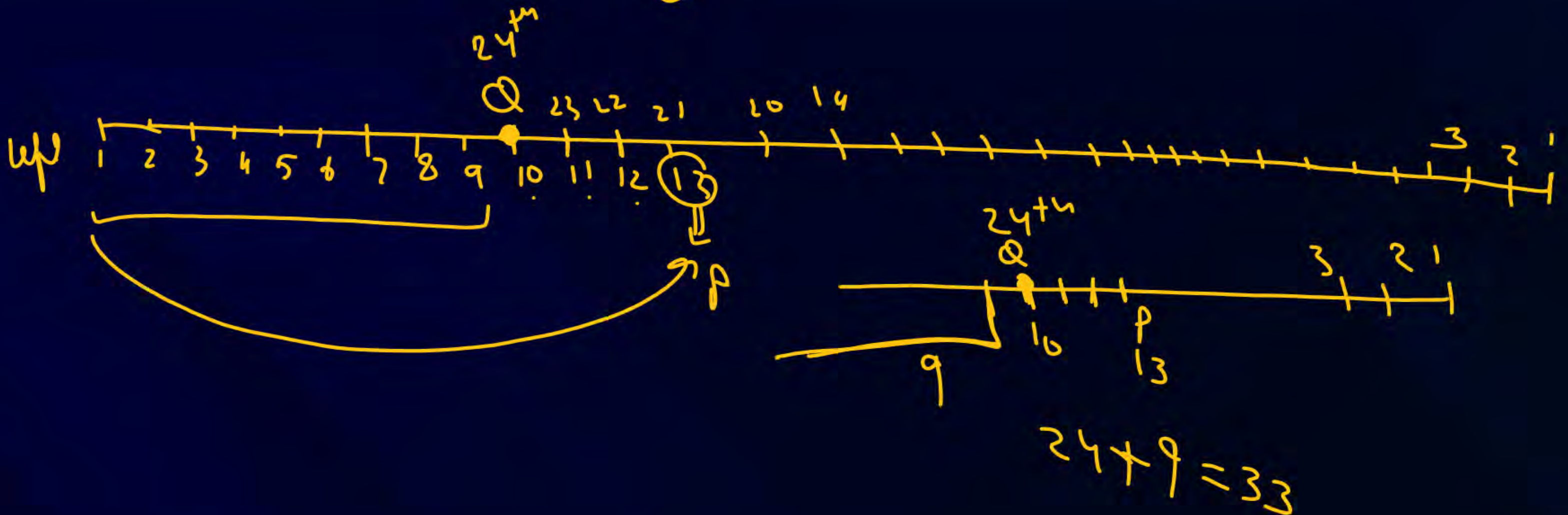
(a) 34

(b) 31

(c) 32

(d) 33

(1 mark)



QUESTION

CA

Six persons A, B, C, D, E and F are sitting in two rows with three persons in each row. Both rows are in front of each other. E is not at the end of the any row and D is second left to the F, C is neighbour of E and diagonally opposite to D. If B is neighbour of F who is in front of C then who is sitting diagonally to F?

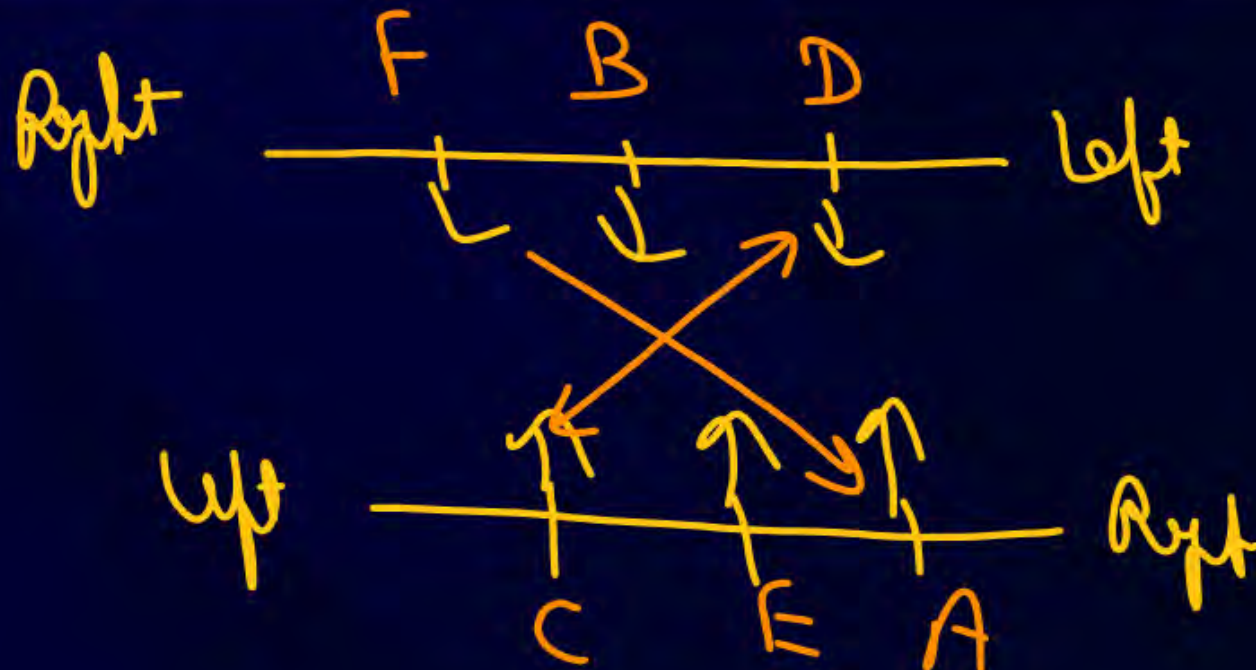
(a) C

(b) E

(c) A

(d) D

(1 mark)



QUESTION



P, Q, R, S and T are sitting in a line facing West. P and Q are sitting together. R is sitting at South end and S is sitting at North end. T is neighbour of Q and R. Who is sitting the middle?

(a) P

☒ (b) Q

(c) R

(d) S

(1 mark)





THANK YOU



Type Heading Here



For Normal Text



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- Those who don't know, Press (Alt) + (=) button to type in Cambria Math for equations like -

Equation



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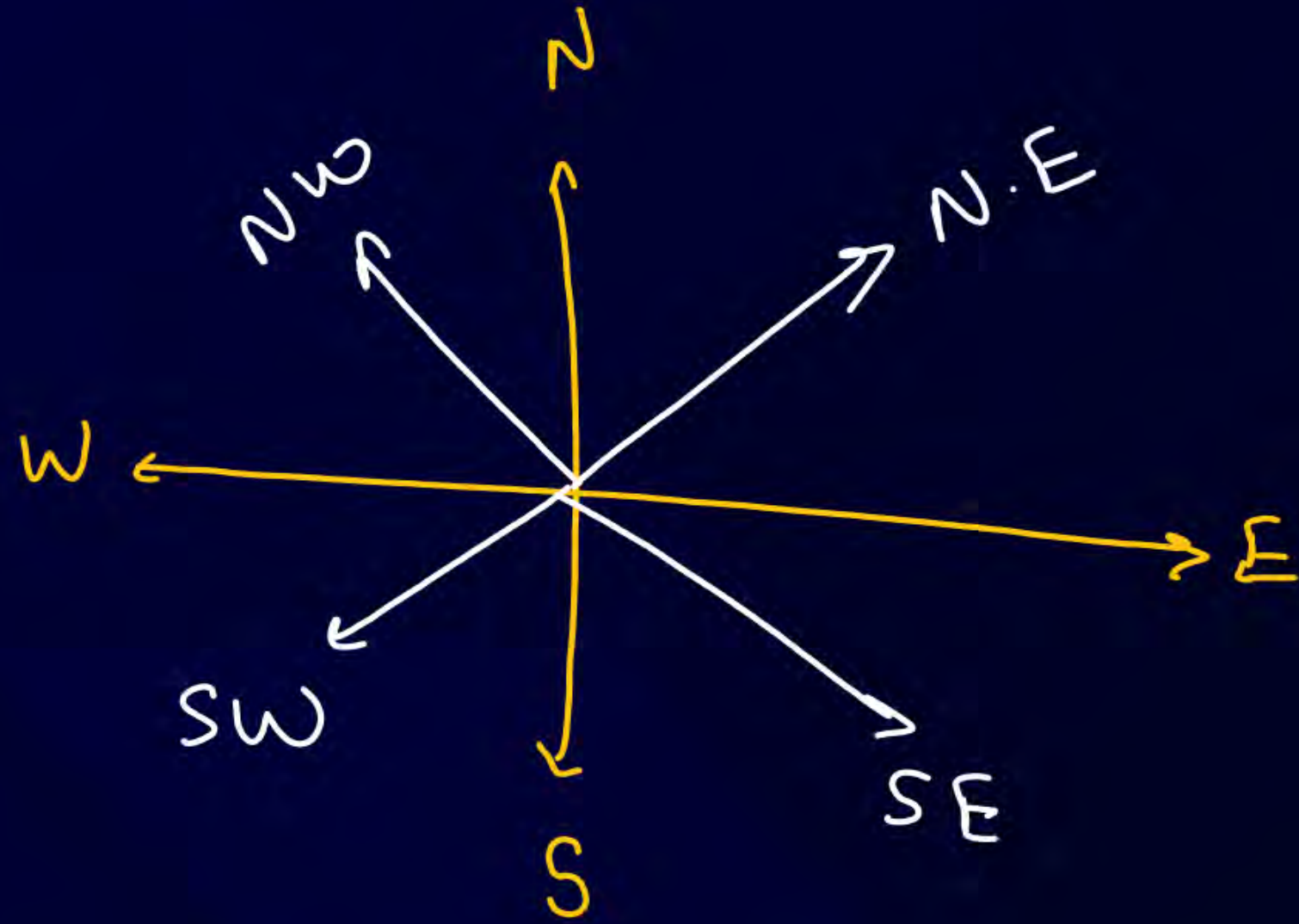
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PS – This ppt is given for design purpose only and for your reference that where to type what or how to go with your final ppt content. So please follow the written instructions given in each placeholder and remove the given 'type here' text to type your related content on the same place. **Do use Microsoft PowerPoint slideshow** for its best view & If you have any issues, please connect with our ppt team.



Direction Test

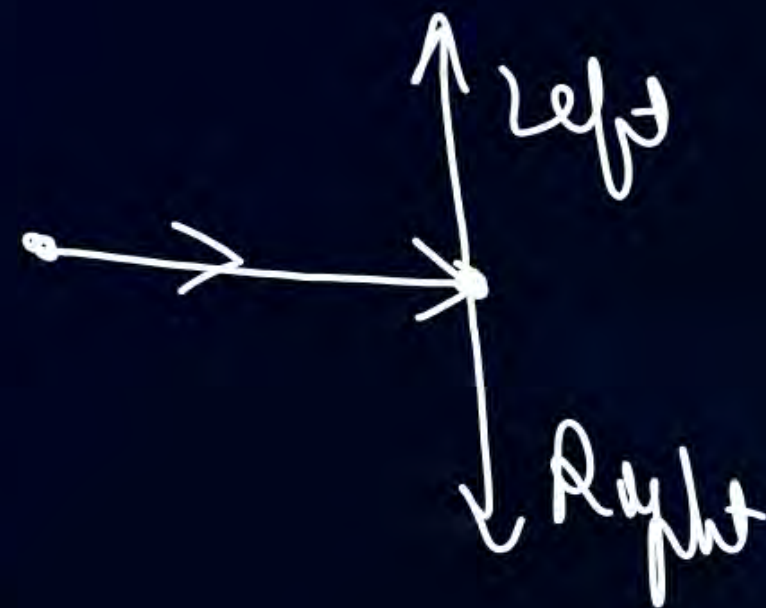
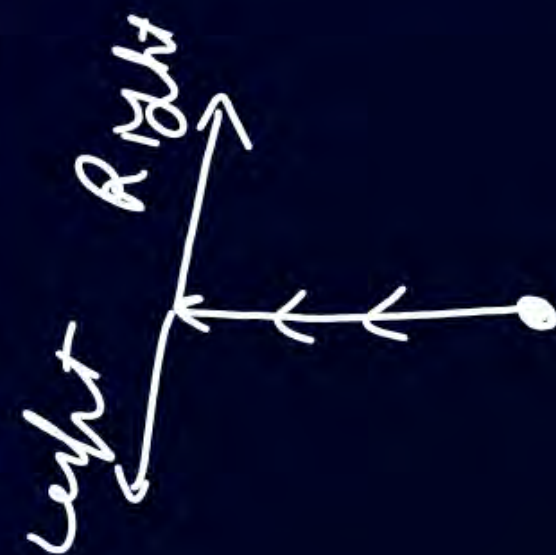
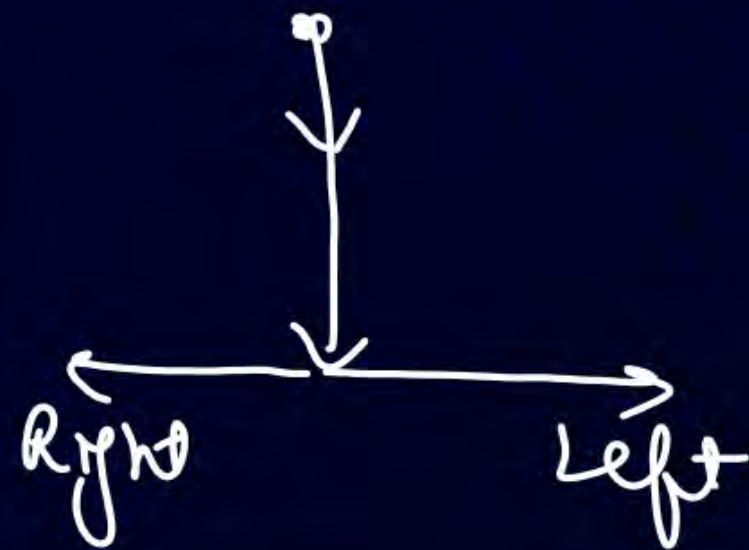
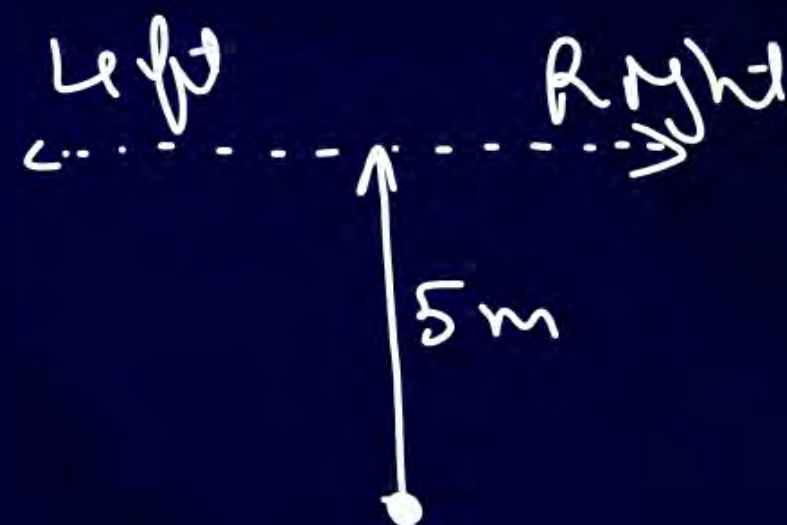
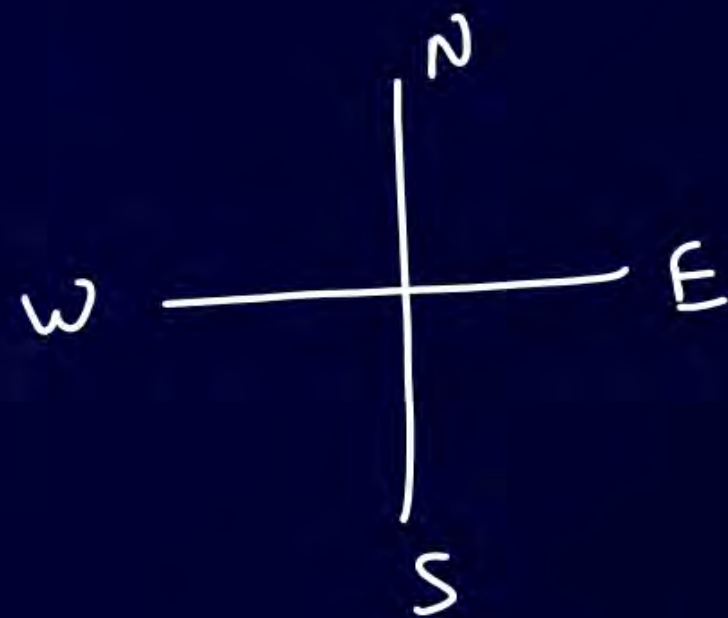


Clockwise



Anticlockwise



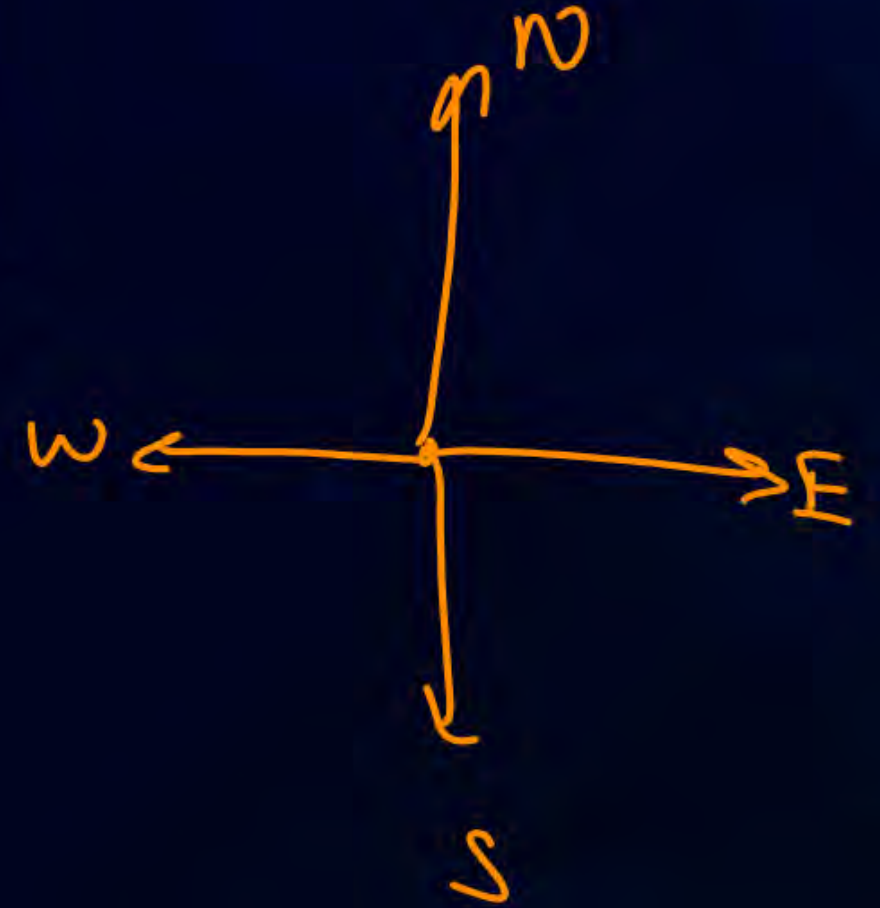
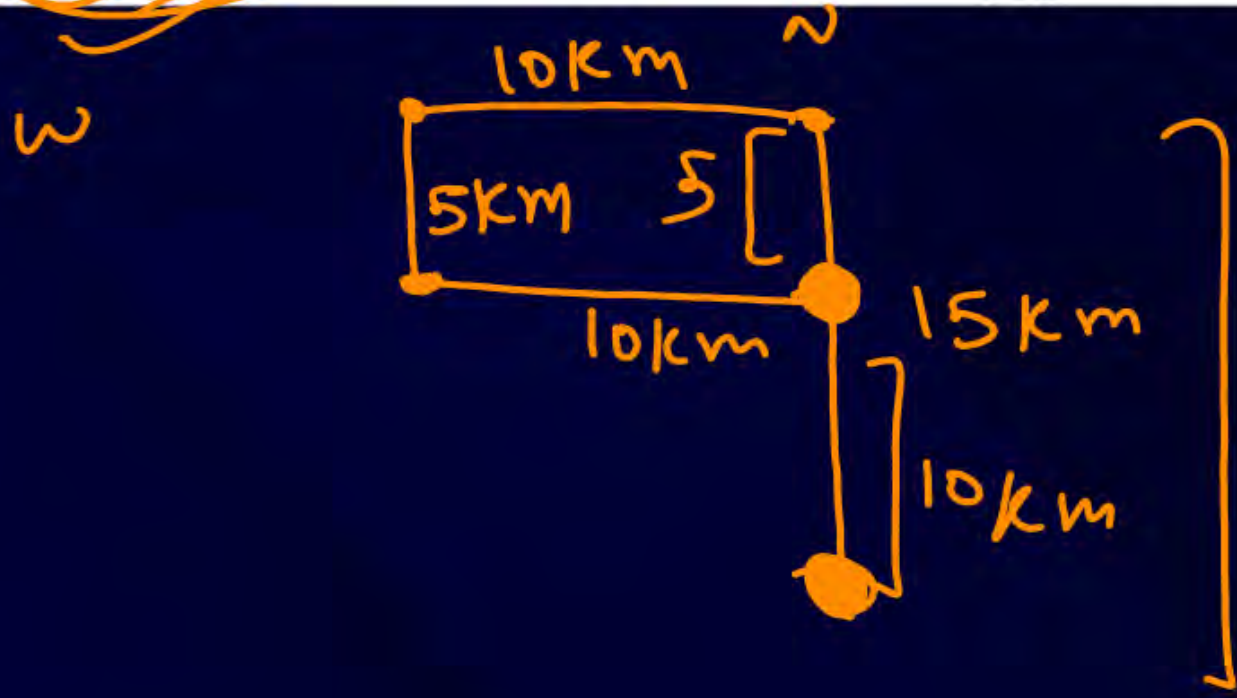


QUESTION

CA

Laxman went 15 km to North then he turned West and covered 10 kms. Then he turned South and covered 5 km. Finally turning to East he covered 10 km. In which direction he is from his house.

- (a) East (b) West
(c) North (d) South (1 mark)



QUESTION

CA

A man is facing East, then he turns left and goes 10 meter then turns right and goes 5 meter then goes 5 meter to the South and from there, 5 meter to West. In which direction is he from his original place?

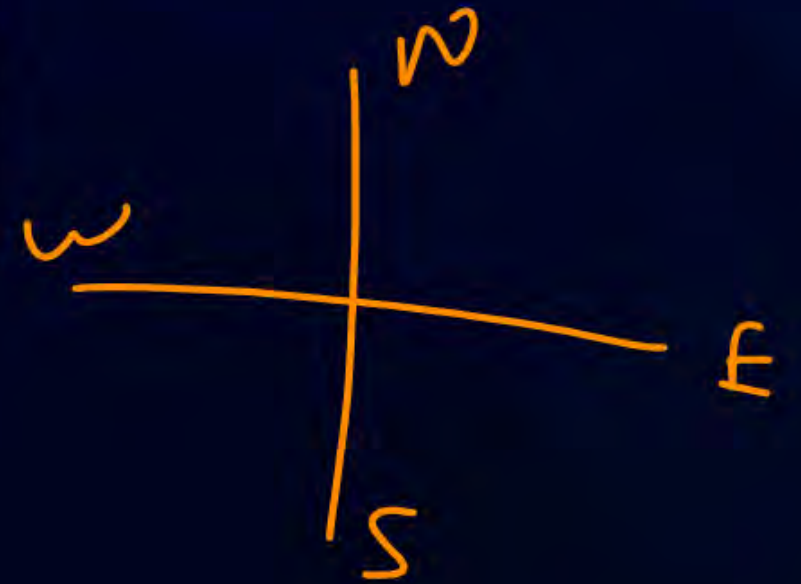
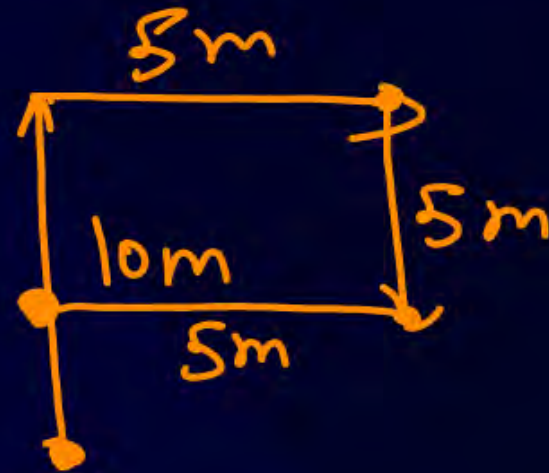
(a) East

(b) West

(c) North

(d) South

(1 mark)



QUESTION

X walks southwards and then turns right, then left and then right. In which direction is he moving now?

- (a) South (b) North
(c) West (d) South-west (1 mark)



QUESTION

CA

I stand with my right hand extended side-ways towards south. Towards which direction will my back be?

(a) North

☒ (b) West

(c) East

(d) South

(1 mark)



QUESTION

CA

You go North, turn right, then right again and then go to the left. In which direction are you now?

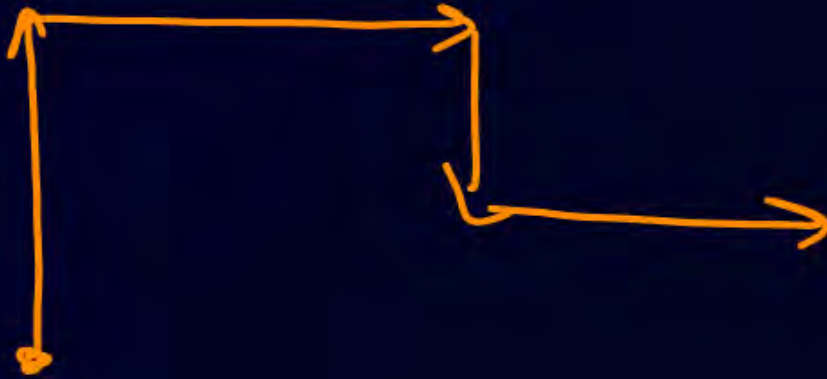
(a) South

(c) West

~~(b)~~ East

(d) North

(1 mark)



QUESTION



Anoop Starts walking towards South. After walking 15 metres, he turns towards North. After walking 20 metres, he turns towards East and walks 10 metres. He then turns towards south and walks 5 metres. In which direction is he from the original position.

(a) North

(b) South

(c) East

(d) West

(1 mark)

N
W + E
S



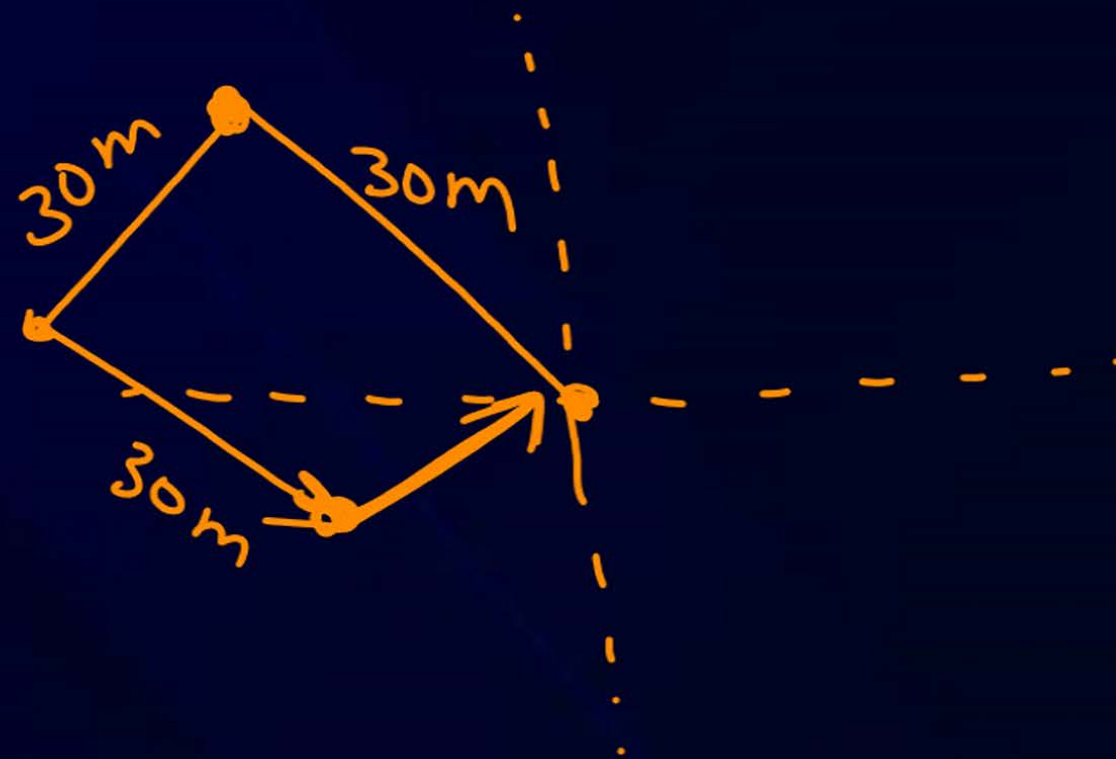
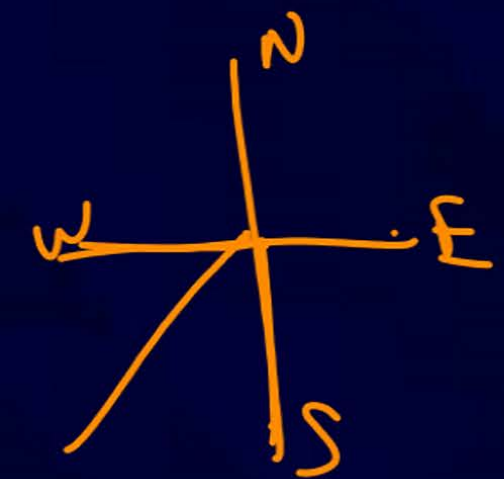
QUESTION



Sangeeta leaves from her home. She first walks 30 meters in north-west direction and then 30m in south west direction, next she walks 30 metres in south-east direction. Finally she turns towards her house. In which direction is she moving now?

- (a) North - West
- (b) North - East
- (c) South - East
- (d) South - West

(1 mark)



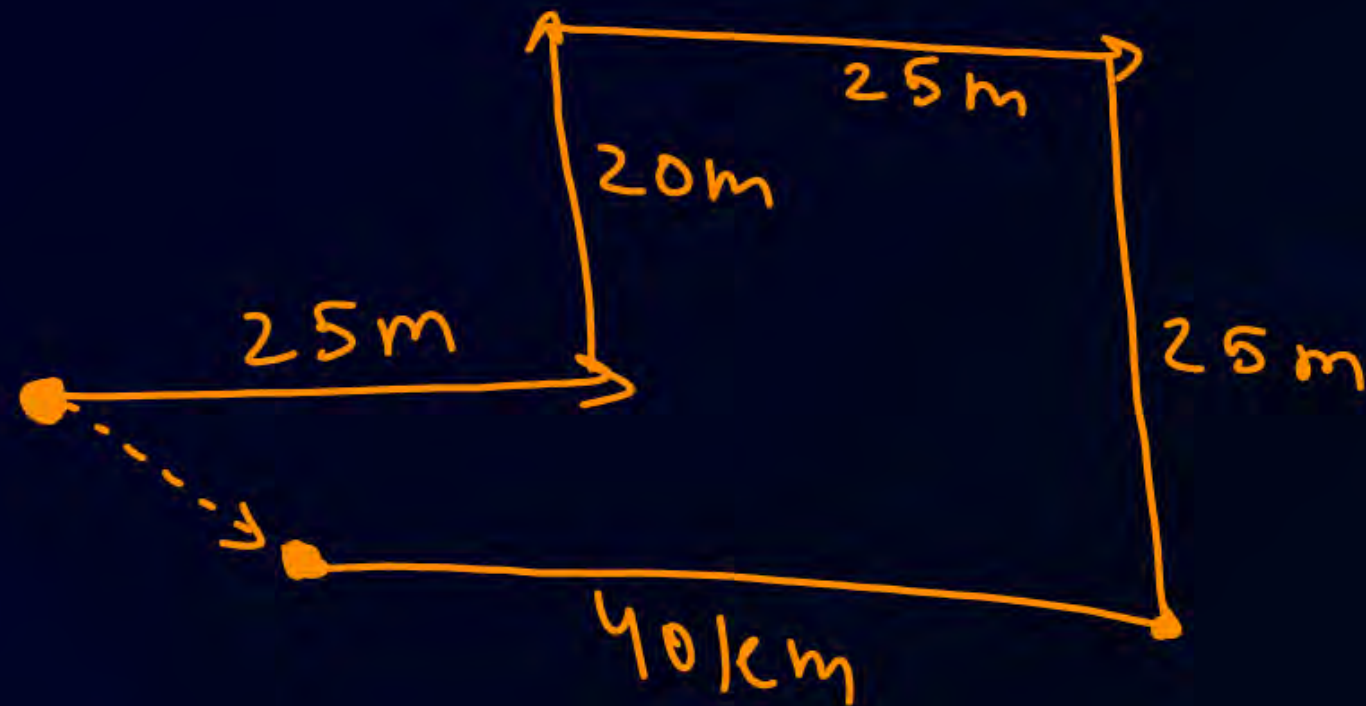
QUESTION



When a person faces north and walks 25m right then turns left and walks 20m, and again turns right and walks 25m, and turns right, and walks 25m, and turns right and walks 40m, in which direction is he now from his starting point?

- (a) North – West
- (b) North – East
- (c) South – East
- (d) South – West

(1 mark)



QUESTION

One day, Ram left home and cycled 10 km southward, turned right and cycled 5 km and turned right and cycled 10 km and turned left and cycled 10 km. How many kilometers will he have to cycle to reach his home straight?

- (a) 10
- (b) 15
- (c) 20
- (d) 25

(1 mark)



$$10 + 5 = 15 \text{ km}$$

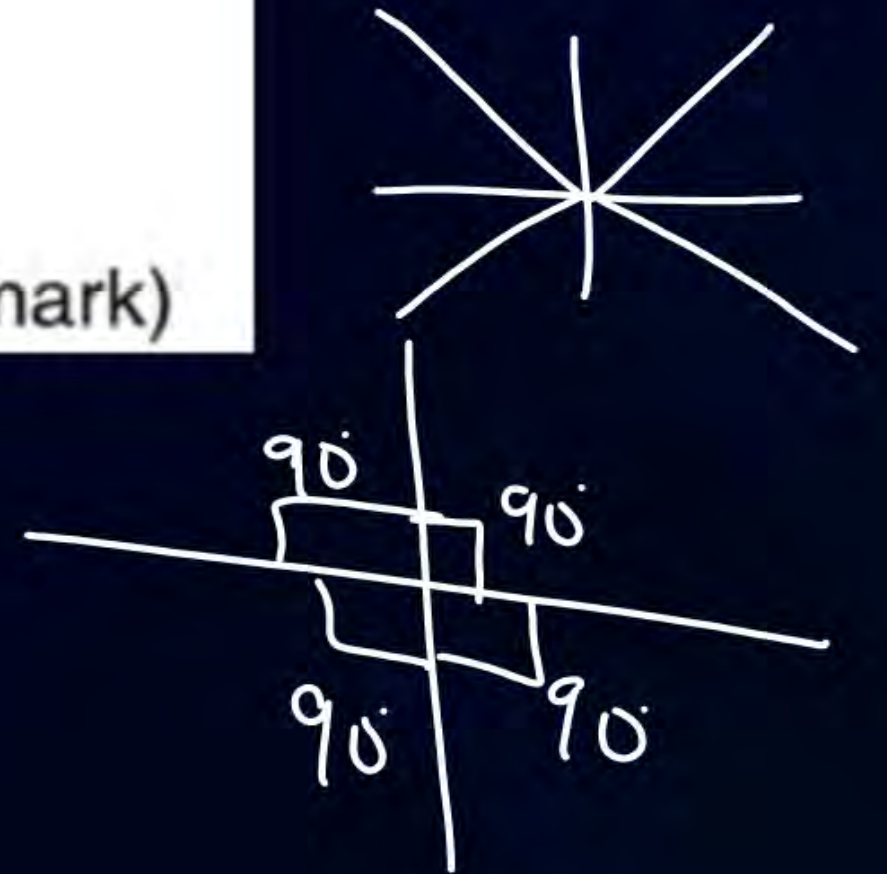
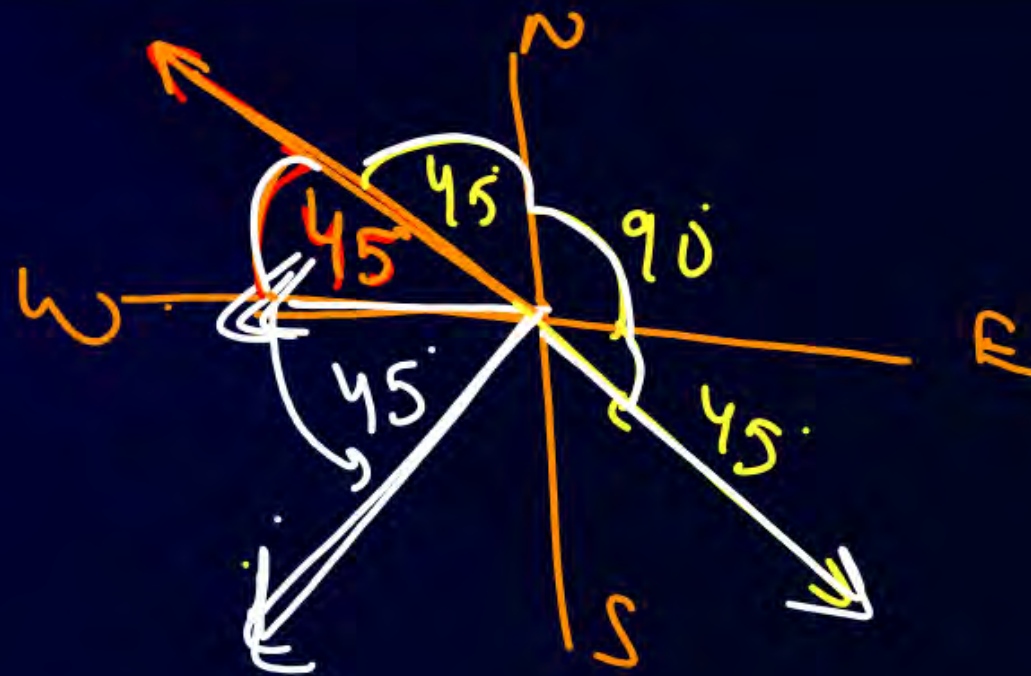
QUESTION

CA

A man is facing west he turns 45 degrees in the clockwise direction and then another 180 degrees in the same direction and then 270 degrees in the anticlockwise direction. Which direction is he facing now?

- (a) South-west
- (b) North-west
- (c) West
- (d) South

(1 mark)

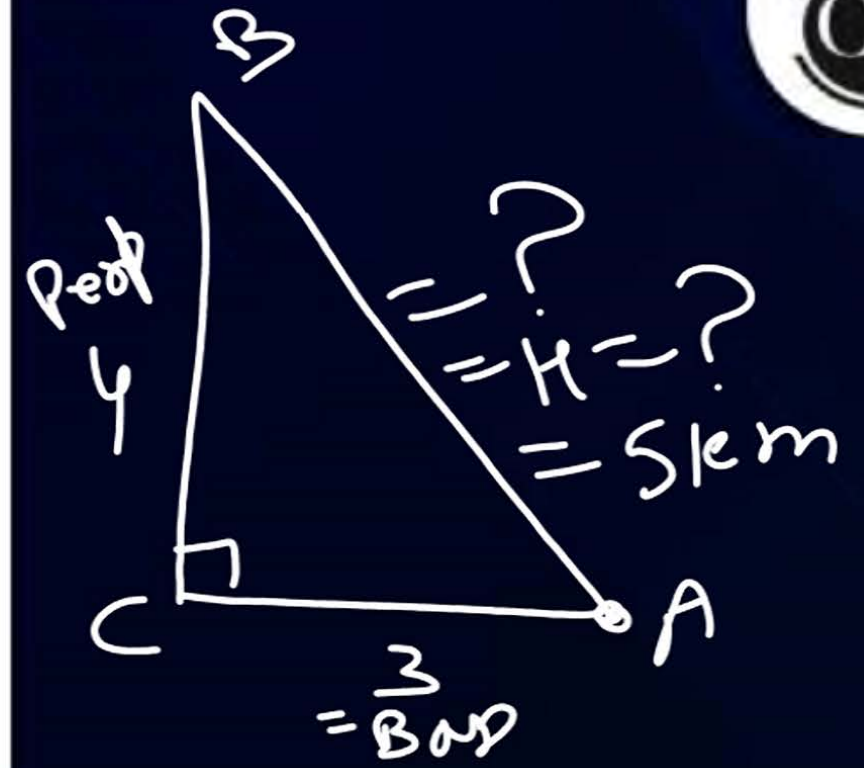


A man can walk by having long, medium and short steps. He can cover 60 meters by 100 long steps, 100 meters by 200 medium steps and 80 meters by 200 short steps, he walks taking 5000 long steps, then he turns left and walk by taking 6000 medium steps. He then turns right and walk by taking 2500 short steps. How far (in meters) is he away from his starting point?

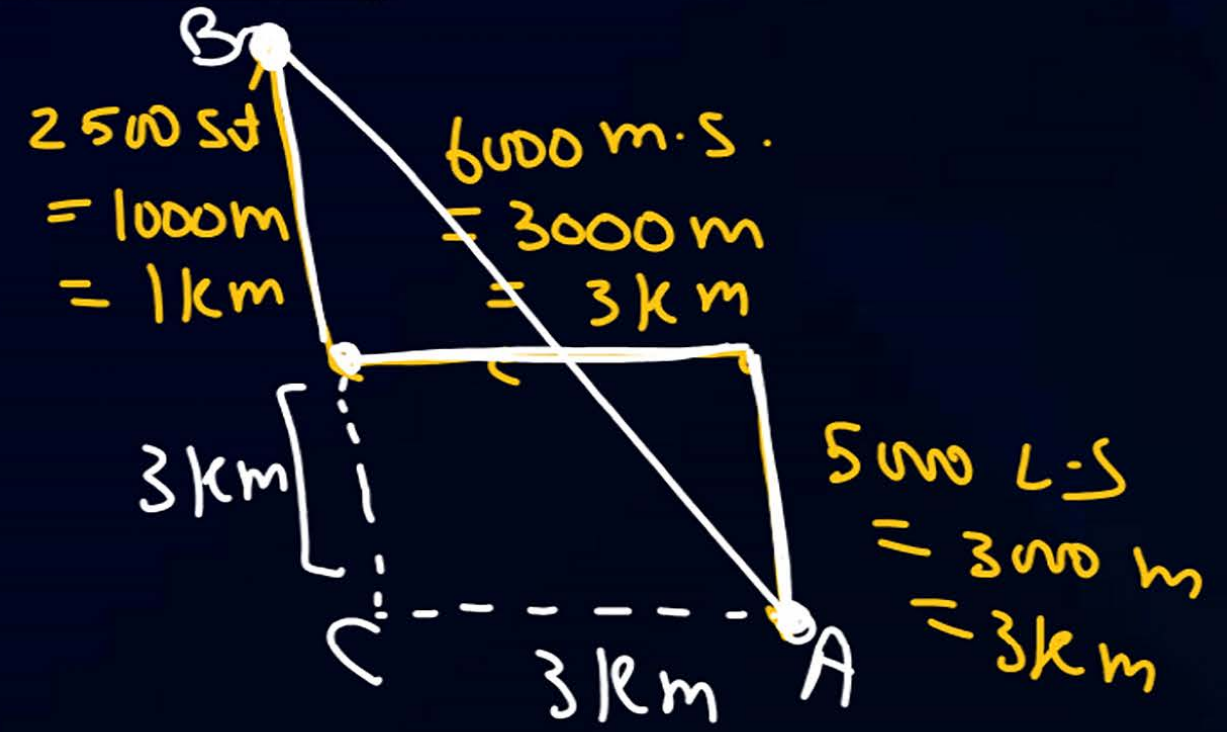
- (a) 5000 m
- (b) 4000 m
- (c) 6000 m
- (d) 7000 m

$$\begin{aligned}
 H^2 &= B^2 + P^2 \\
 &= 3^2 + 4^2 \\
 H^2 &= 25 \\
 \boxed{H} &= \boxed{5}
 \end{aligned}$$

(1 mark)



Long $\Rightarrow 100 \text{ steps} = 60 \text{ m} \Rightarrow 1 \text{ step} = \frac{60}{100} = 0.6 \text{ m}$
 medium $\Rightarrow 200 \text{ steps} = 100 \text{ m} \Rightarrow 1 \text{ step} = 0.5 \text{ m}$
 Short $\Rightarrow 200 \text{ steps} = 80 \text{ m} \Rightarrow 1 \text{ step} = 0.4 \text{ m}$

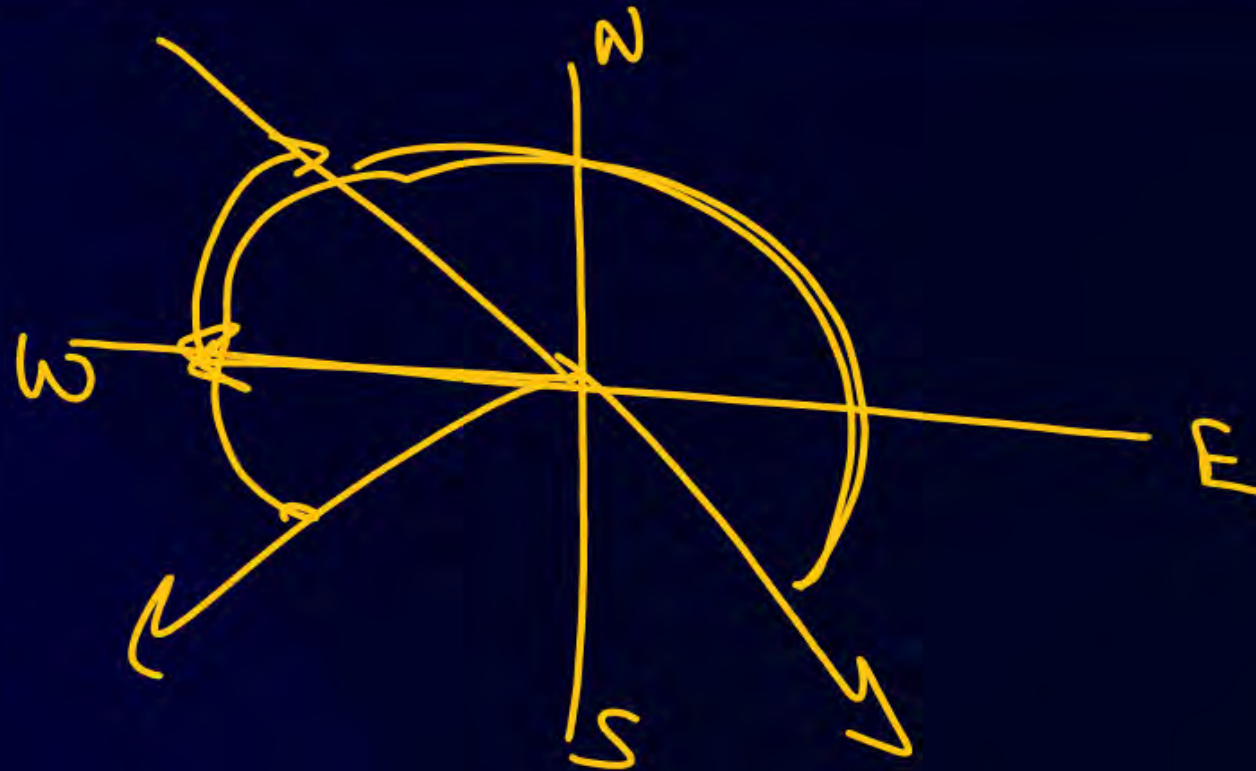


QUESTION



A man is facing west. He turns 45° in the clockwise direction and then another 180° in the same direction and then 270° in the anti-clockwise direction. Which is he facing now?

- (a) South-West
- (b) North-West
- (c) West
- (d) South



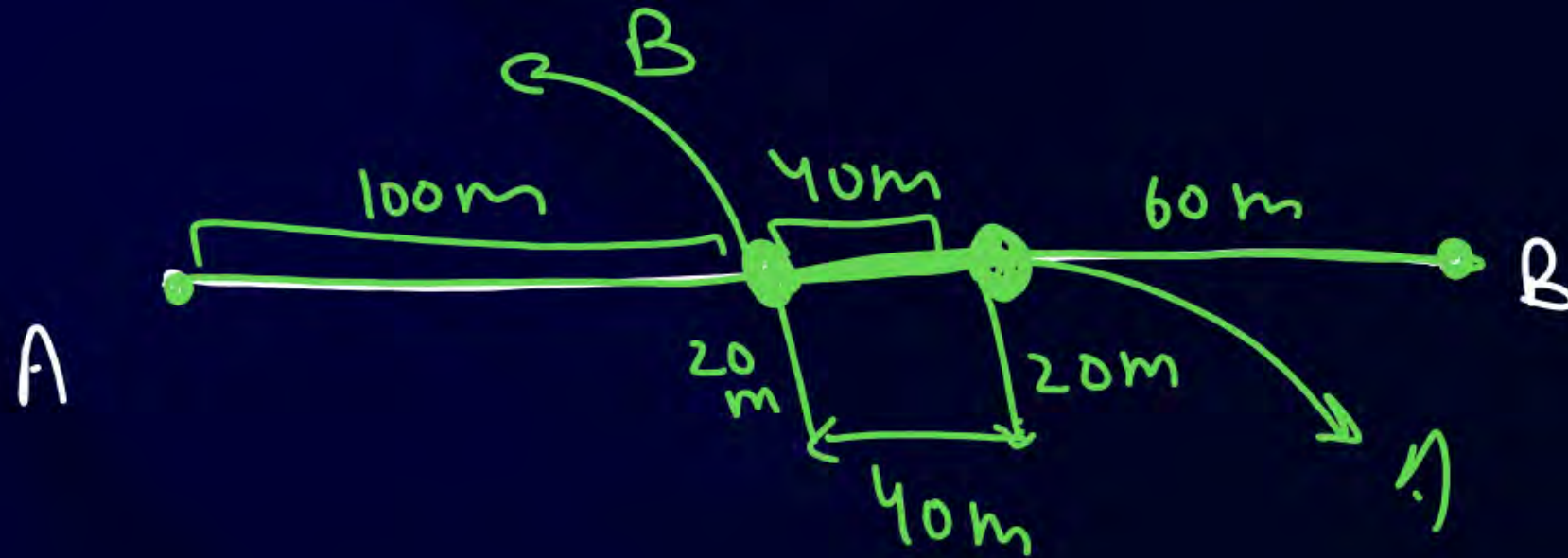
QUESTION



A and B start moving towards each other from two places 200m apart. After walking 60m, B turns left and goes 20m, then he turns right and goes 40 m. He then turns right again and comes back to the road on which he had started walking. If A and B walk with the same speed, what is the distance between them now?

- (a) 80 m
- (b) 70 m
- (c) 40 m
- (d) 60 m

(1 mark)



QUESTION

CA

R's office is 4 km. in East direction from his home and club is 4km. in North direction from his home. On midway from office to club, R starts moving towards his home. In which direction is he facing his back?

- (a) South-East (b) North-West
(c) North-East (d) South-West (1 mark)

