2/2 Suleman CSA.

Q2

(A) In a Certain . . . — — in the same code?

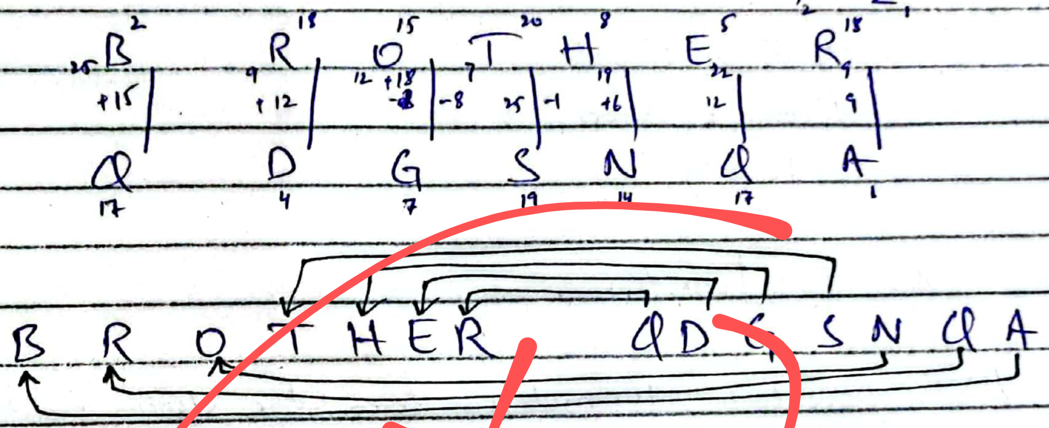
Answer

A 1/26	B 2/25	C 3/24	D 4/23	E 5/22	F 6/21
G 7/20	H 8/19	I 9/18	J 10/17	K 11/16	L 12/15
M 13/14	N 14/13	O 15/12	P 16/11	Q 17/10	R 18/9
S 19/8	T 20/7	U 21/6	V 22/5	W 23/4	X 24/3
		Y 25/2	Z 26/1		

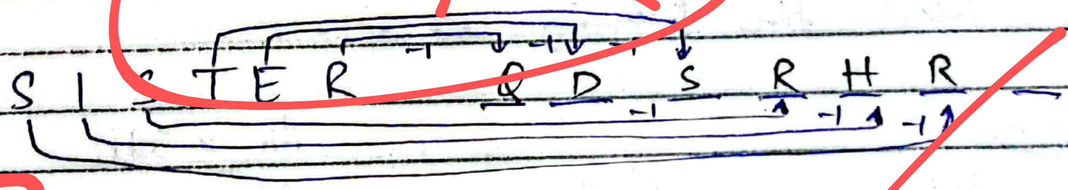
Given

BROTHER

QDGSNQA



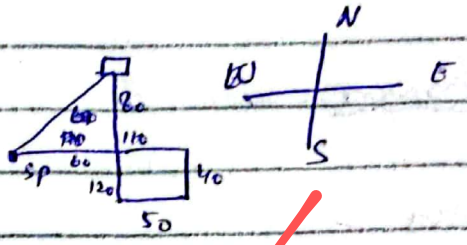
By following the same pattern to decode the required word.



In the same language SISTER can be written as QDSRHR.

(B) For his morning walk ..... starting point.

Ans



How fars travelled

We know that

$Hyp^2 = Perp^2 + Base^2$

$x^2 = (80)^2 + (60)^2$.

$= 6400 + 3600$

$x^2 = 10000$

$x = 100$ meters.

He travelled 100 meters from the starting point.

(C) Read the following .....

Ans

Let the weight of

Sheharyar = x.

then

Sheharyar = x

Nasir. = 2x.

Akbar = 2(2x) = 4x.

Ali = 5(4x) = 20x.

Ahmad = 3(Ali) = 3(20x) = 60x.

Ah = 3Ali

Ali = 5Akb.

2 Akbar = N

2N = Sheharyar

(i) Ahmad is the heaviest among all.

(ii) Shahbaj is the lightest among all.

(iii) Shahbaj is

(C) Read the following.

Ans

Let the weight of Shehbaj $= x$

Ahmad = 3Ali

Ali = 5 Akbar

2 Akbar = Nasir

2 Nasir = Shehbaj

Nasir weighs half as much as Shehbaj $= \frac{1}{2}(x) = \frac{x}{2}$

Akbar weighs half as much as Nasir $= \frac{1}{2}\left(\frac{x}{2}\right) = \frac{x}{4}$.

Ali weighs 5 times as much as Akbar $= 5\left(\frac{x}{4}\right) = \frac{5x}{4}$

Ahmad weighs thrice as much as Ali $= 3\left(\frac{5x}{4}\right) = \frac{15x}{4}$.

(i) Ahmad is the heaviest among them.

(ii) Akbar is the lightest among them because of lowest denominator.

(iii) Shahbaj is lighter than Ahmad and Ali

(iv) Shahbaj is heavier than Akbar and Nasir

(v)

Ahmad	Ali	Shahbaj	Nasir	Akbar
$\frac{15x}{4}$	$\frac{5x}{4}$	x	$\frac{x}{2}$	$\frac{x}{4}$.

(D) Aslam is willing ..... with these tiles?

Ans

lounge Area = 8m x 6m.
= 48 m². = 480000 cm².

How much cost = ?

Tiles size = 12cm x 4cm.
Tiles area = 12cm x 4cm = 48 cm²
Triangle tiles = $\frac{1}{2}$ (48 cm²)
= 24 cm²

Tiles required in Nos. for lounge = $\frac{\text{lounge Area}}{\text{Area of tiles}}$

= $\frac{480000 \text{ cm}^2}{24 \text{ cm}^2}$

No. of tiles = 20000

Price of one tiles = Rs 15'
Price of required tiles = 15 x 20000
= Rs 300000/-

Q no. 1

(A) (D) Find the next term...

Ans

6, 17, 39, 72 ____ ?

In the given series there is a difference of multiple of "11" so the next number will be

72 + 44 = 116 Ans

Rough

17
6
11

39
17
22

72
39
33

(C)

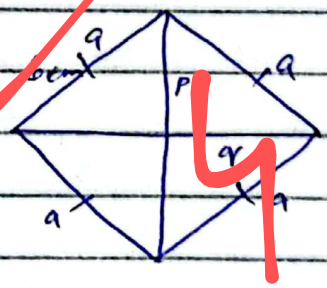
Ans **Rhombus:**

A Rhombus has all sides congruent and opposite sides are parallel to each other so

P = 4a

P = 4 (6cm)

P = 24cm



(B)

Ans

let the signals A, B.

A blinks = 6s.

B blinks = 8s.

For the least common time of the signals to blink together calculated by L.C.M.

2	6, 8
2	3, 4
2	3, 2
3	3, 1
	1, 1

$2 \times 2 \times 2 \times 3 = 24$ s.

Signals will blinks together after 24 s.

(A)

Sol.

Let the initial No. of boys & girls invited to the party = x

After extra "15" girls = $x + 15$

Given ratio of boys & girls = 4 : 5.
after adding 15 girls.

According to given situation equation can be written as

$$4 : 5 = x : x + 15$$

$$\frac{4}{5} = \frac{x}{x+15}$$

$$4(x+15) = 5x$$

$$4x + 60 = 5x$$

$$\boxed{60 = x}$$ original No. of boys & girls

x