

QUESTION #62 :

A).

BROTHER = QDSSNQA  
 SISTER = ?

Solution:

BROTHER  
 QDSSNQA

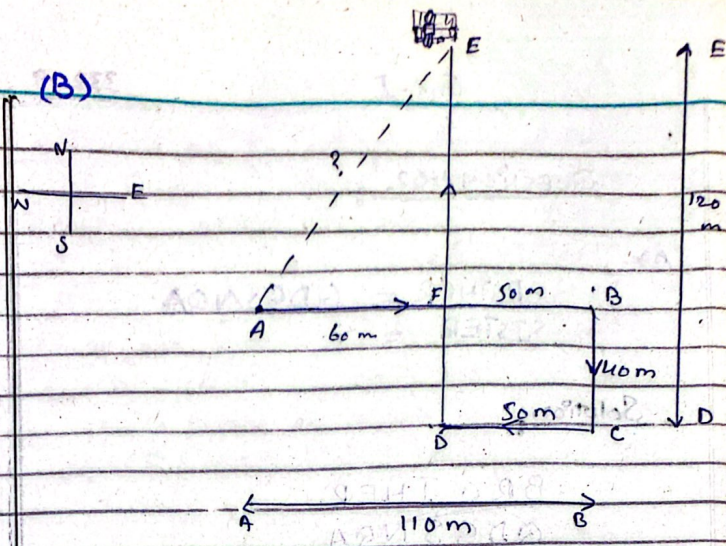
Clearly, each letter in the word  
 BROTHER is moved one step backward  
 and in reverse order, to obtain  
 the corresponding QDSSNQA.

Therefore,

SISTER = QHRSDQ

in SISTER, S will be coded Q, I  
 as H, S as R, T as S, E as D  
 and R as Q. Thus, the code  
 becomes

QHRSDQ Ans.



SOLUTION:

Clearly Haroon walked eastward from point A to B,  $AB = 110\text{m}$   
 Then B to right C  $BC = 40\text{m}$  Again  
 C to right D  $CD = 50\text{m}$   
 then D to E (last)  $DE = 120\text{m}$

So,  $BF = CD$

$AF = AB - BF = 110 - 50 = 60\text{m}$

Also,

$DE = 120\text{m}$

$DF = BC = 40\text{m}$

So,

$EF = DE - DF = 120 - 40 = 80\text{m}$

Haroon's distance from starting point



$$x \quad A = AE = \sqrt{(AF)^2 + (EF)^2}$$

$$\frac{x}{2} \quad = \sqrt{(60)^2 + (80)^2}$$

$$\frac{x}{2} \quad = \sqrt{3600 + 6400}$$

$$= \sqrt{10000}$$

$$AE = 100m \text{ Ans.}$$

(C) : Answer the Questions

- i) Who is heaviest in weight?
- ii) Who is lightest?
- iii) Shahbaz is lighter than which of two
- iv) Shahbaz is heavier than which of two
- v) Show descending order?

SOLUTION:

- Ahmad (374kg)
- Ali (57kg)
- Akbar (half of Nasir)
- Nasir (1/2 of Shahbaz)
- Shahbaz (???)

Sol<sup>n</sup>: If shahbaz's weight is  $x$

Nasir is half of shahbaz =  $\frac{x}{2}$

AKbal is  $\frac{1}{4}$  of Nasir =  $\frac{x}{2} \div 2 = \frac{x}{4}$

Now,

Ali is 5 times of AKbal =  $(\frac{x}{4}) \times 5$

Now,

Ahmad is 3 times of Ali =  $(\frac{5x}{4}) \times 3$

Therefore, putting any value:

If shahbaz's weight is ( $x$ ) = 12

$$\text{Nasir's} = \frac{x}{2} = \frac{12}{2} = 6$$

$$\text{AKbal's} = \frac{x}{4} = \frac{12}{4} = 3$$

$$\text{Ali's} = \frac{5x}{4} = \frac{5(12)}{4} = \frac{60}{4} = 15$$

$$\text{Ahmad's} = \frac{15x}{4} = \frac{15(12)}{4} = 45$$

Hence,

- i) - Heaviest = Ahmad
- ii) - Lightest = AKbal
- iii) - shahbaz lighter = Ali & Ahmad



iv- Shahbaz is heavier than =  
Nasim & Akbar.

v- Decending order.

AKbar > ALi > Shahbaz > Nasim > Akbar.

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D.

Solution:

- Area of one right triangle is  
 $A = \frac{1}{2} bh$  (base  $\cdot$  height)

$$A = \frac{1}{2} (4 \times 12)$$

$$A = 24 \text{ cm}^2$$

- Area of Lounge

$$L = 8 \text{ m} = 800 \text{ cm}$$

$$W = 6 \text{ m} = 600 \text{ cm}$$

$$A = 800 \times 600$$

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

- Number of tiles required to fill

$$\text{lounge} = \frac{480000}{24} = 20000$$

24

$$\text{Tiles required} = 20000$$

$$\downarrow \text{tile cost} = 15 \text{ Rupees}$$

$$20000\text{'s COST} = 15 \times 20000 =$$

30000 Rupees.

### QUESTION NO # 01

D. FIND NEXT TERM:

$$6, 17, 39, 72, \underline{116}$$

Solution.

Clearly, the pattern which is followed is

$$6+11, 17+22, 39+33, 72+44$$

So,

missing term = 116 Answer.



C. CALCULATE PERIMETER OF RHOMBUS:

SOLUTION:

Perimeter of Rhombus =  $P = 4a$   
As,

$$a = 6 \text{ cm}$$

So,

$$P = 4(6) = 24 \text{ cm}$$

$P = 24 \text{ cm}$	Answer
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B. F-10 Signal:

SOLUTION:

First Blink = 6 sec

Second Blink = 8 sec

First	will blink like:	6	8	Second
	Second time Blink:	12 sec.	16	
	3rd blink	18 sec	24	
	4th blink	24 sec.		

24 sec is overlapping.

At 24 sec both of signals  
will blink together.

**24 Sec** Answer

A).

ANNUAL PARTY:

Ratio : Boys to girls.  
4 : 5

Extra = 15 girls

We know that :

$$1:5 = 15 \text{ extra girls.}$$

Therefore,

$$4:5 = 60$$

$$4 \times 15 = 60$$

Total Boys + girls were

**120** Answer