

## AGE PROBLEMS:-

1. If my present age is 4 years and my brother's age is half than me. What will my brother's age when I shall 100 years?

My age = 4 years, My Brother's age = 2 years  
\* I am 2 years older than my Brother  
When I'm hundred years  
My brother's age =  $100 - 2$   
 $= 98$

2. Adil is 5 years old and his sister is 3-times of his age. Age of his sister when he will be 15 years old? Adil's age = 5 years

Sister's age =  $3 \times 5 = 15$   
Sister is 10 years older than Adil  
When Adil is 15, sister will be:

25

3.

3. If Ali's age is 5 years and Sidra is twice of Ali's age, what will be Sidra's age when Ali is 11 years?

Ali = 5

Sidra = 10

When Ali is 11

Then Sidra will be?

Sidra is 5 years older than Ali

$= 11 + 5$

$= 16$



4. If my age is 10 years and my brother is 2 times of my age. What will be the ratio after 10 years?

My age = 10 years

Brother age =  $2 \times 10 = 20$

10 : 20

After 10 years -----

20 : 30

2 : 3

2. Akbar is older than Ahmad and Umair is older than Akbar. Who is oldest?

Umair > Akbar > Ahmad

oldest  $\Rightarrow$  Umair

3. Muzafa is older than Aleena but younger than Sidra who is youngest?

Sidra > Muzafa > Aleena

youngest  $\Rightarrow$  Aleena

4. If Ali is taller than Hamza but smaller than Nadeem. Who is the tallest?

Nadeem > Ali > Hamza

Tallest  $\Rightarrow$  Nadeem



# Distance & Travel

If a man travel 90 Km in 1 hour and 40 minutes. He will cover 1 Km in?

90 Km  $\longrightarrow$  1 hour and 40 min

**Magic**

**Trick**

$\left\{ \begin{array}{l} \text{distance} \times \{ \} \\ \text{hour} \\ \text{asked} \\ \text{value} \end{array} \right\}$

$\therefore$  1 hour = 60 minutes

60 + 40 = 100 minutes

90 Km  $\longrightarrow$  100 minutes

$$\begin{array}{r} 90 \times 1 \\ \hline 100 \\ 1.1 \end{array}$$

$$\begin{array}{r} 90 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 1.1 \\ 9 \overline{) 10} \\ 9 \\ \hline 10 \end{array}$$

Train covers 120 Km in 1 hour, how much distance it will cover in 12 mins.

Distance = 120 Km

1 hour = 60 minutes

$$\begin{array}{r} 120 \\ \hline 60 \end{array} \times 12$$

$$= 24 \text{ Km}$$

Distance is asked  
So.....

$$\left\{ \frac{\text{Distance}}{\text{Time}} \right\}$$



The speed of train is 150 km/hr, how much the distance will the train cover in 15 minutes?

$$\frac{150}{60} \times 15$$

$$= \frac{75}{4}$$

$$= 37.5$$

$$\begin{array}{r} 37 \\ 2 \overline{) 75} \\ \underline{6} \\ 15 \\ \underline{14} \\ 1 \end{array}$$

Train covers distance of 360 km in 1 hr and 40 mins. How far in 30 mins?

$$= \frac{360}{100} \times 30$$

$$= 108 \text{ km}$$

$$\begin{array}{r} 36 \\ 3 \overline{) 108} \\ \underline{108} \\ 0 \end{array}$$

If a train covers 180 km in 90 mins. How far in 60 mins?

$$\left( \frac{180}{90} \times 60 \right) \times$$

we have to find time  
So time is above

$$\frac{180}{90} \times 60$$

$$30$$



Car travels at a speed 540 Km in 1 hour  
 and 40 mins. How much time -----  
 ----- speed of 300 Km.

Time is asked  
 So time is  
 placed  
 above  
 $\frac{\text{Time}}{\text{distance}}$

$$\frac{100}{100} \times \frac{10}{100}$$

$$\frac{540}{279}$$

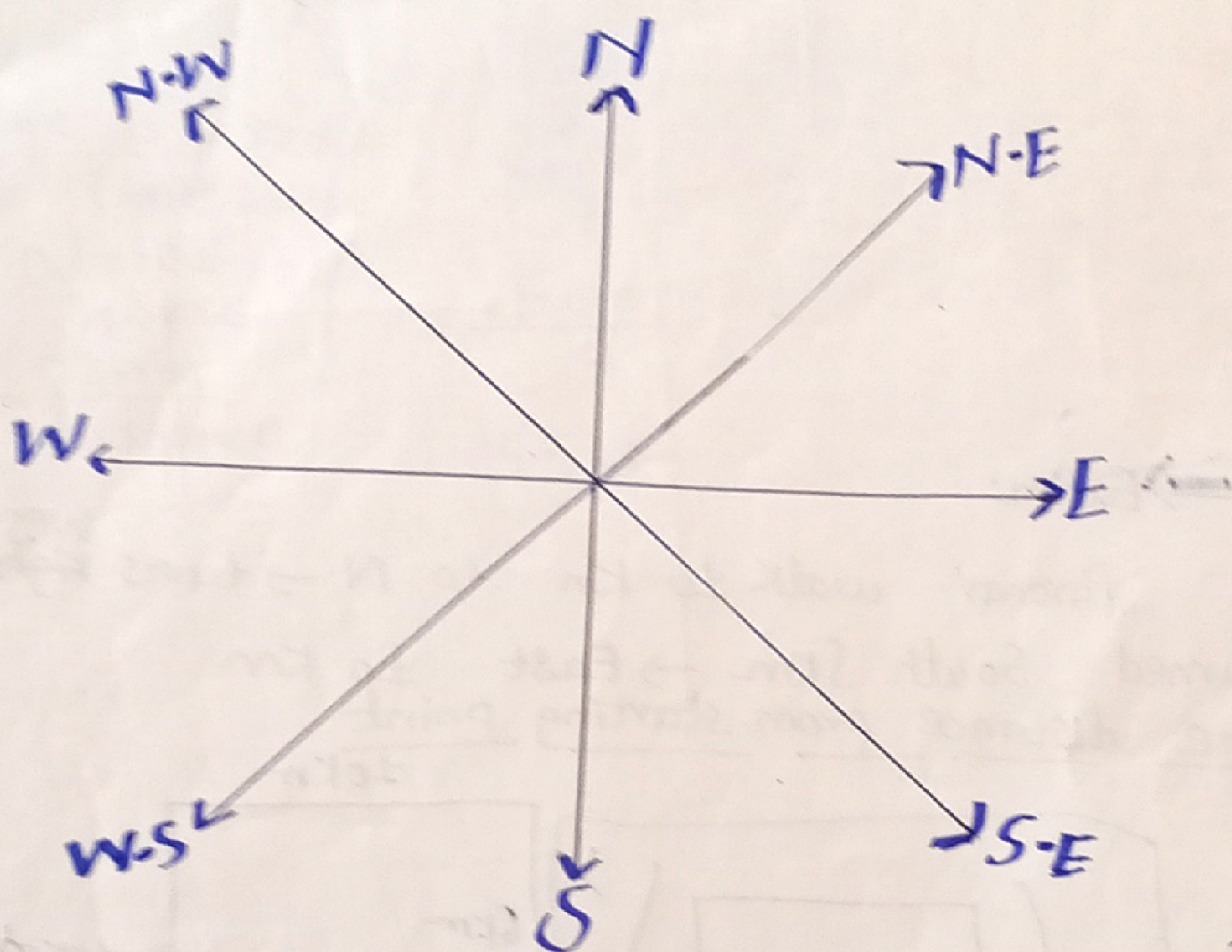
$$\frac{500}{9}$$

$$55.5$$

$$9 \overline{) 500} \\ \underline{45} \\ 50 \\ \underline{45} \\ 5$$



# DIRECTION



⇒ If I am standing on my head with my face pointing Southward in which direction my right hand pointing.

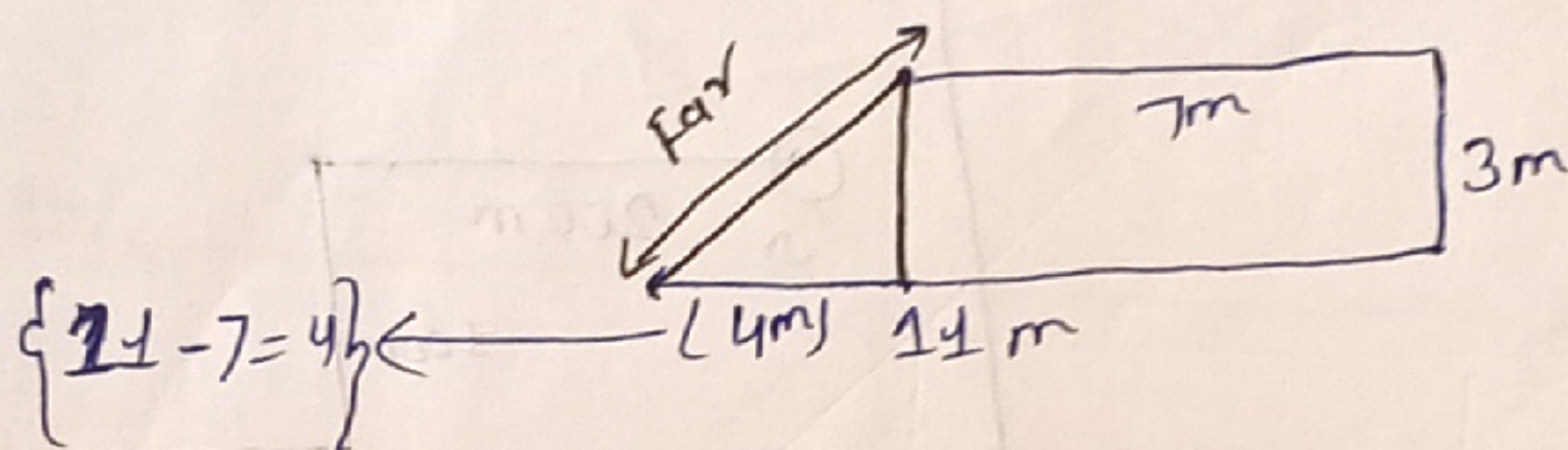
on my head means opposite.

If am pointing towards South  
my right hand direction will be ~~West~~  
But becz iam on my head so correct  
option is East. **(East)**





A man walks 7 miles eastward and turn right and travel 3 miles and further turning right and travel 14 miles. How far is he from the starting point.



$$(\text{hyp})^2 = (\text{perp})^2 + (\text{base})^2$$

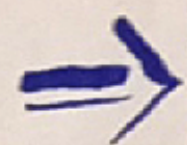
$$\text{hyp}^2 = (3)^2 + (4)^2$$

$$\text{hyp}^2 = 9 + 16$$

$$\text{hyp}^2 = 25$$

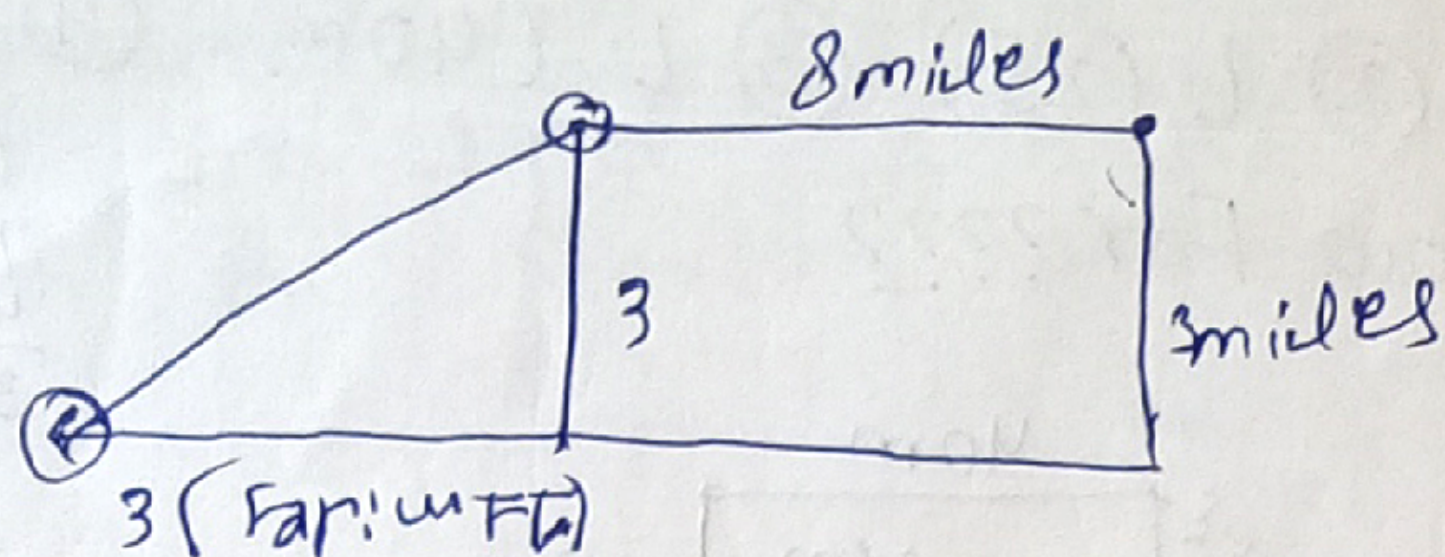
$$\sqrt{\text{hyp}^2} = \sqrt{25}$$

$$\text{hyp} = 5$$



A man walks 8 miles eastward and turn right and travel 3 miles and further turn right and travel 14 miles. How ----- ?





$$\text{base} = \frac{44}{8} \\ = 3$$

$$\text{hyp}^2 = \text{Perp}^2 + \text{base}^2$$

$$= 3^2 + 3^2$$

$$= 9 + 9$$

$$\sqrt{\text{hyp}^2} = 18$$

$$= \sqrt{9 \times 2}$$

$$= \sqrt{9} \times \sqrt{2}$$

$$= 3 \times \sqrt{2}$$

$$= 3\sqrt{2}$$

$$= 3 \times 1.4$$

$$= 4.6$$

R.W

~~1.4~~

1.4

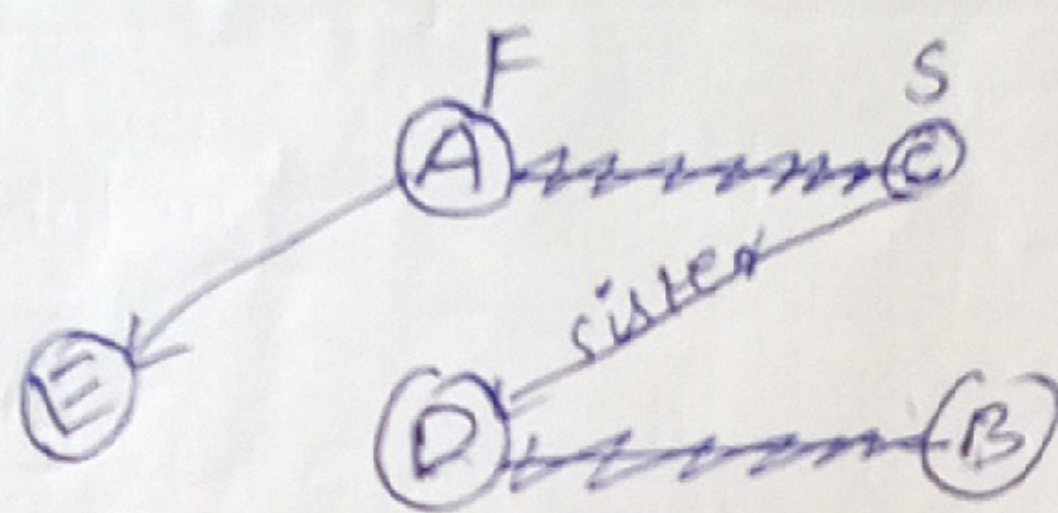
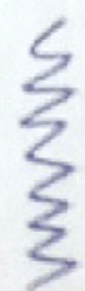
3  
4.6



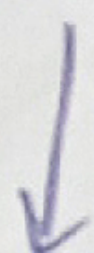
# BLOOD RELATION

- ★ A is father of C and D is son of B.  
E is brother of A. If C is sister of D how  
is B related to E

F/M

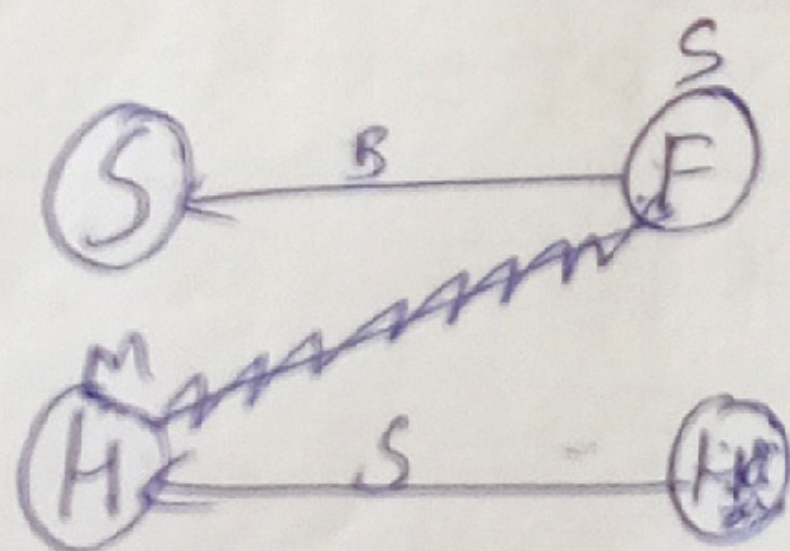


S/B



B is <sup>in</sup> sister's law of E.

- ★ Sameer is brother of Faizan.  
Hanya is sister of Hamza.  
Faizan is son of Hanya.  
Sameer related to Hanya.



(SON)

- ★ A and B are children of C. C is the  
father of A but B is not the  
daughter of C. What is B to C.