

Question 1

(A) Find the missing term

(a) 3, 9, 21, 39, 63, 93

(b) 1, 5, 11, 21, 37, 61

(c) 5, 16, 29, 46, 65, 88, 113

(d) 1, 3, 4, 9, 27, 36, 243, 324, 972

(B) IF KENWOOD is written as
PRGWIOL

PANASONIC
WNGAMEVPP

(C)

E is on the left side of the bench

So 'E' is in position 1

C is on the second position from right

So C is in 4th position

D is not sitting with E

C is sitting next to D

E, B, A, C, D

A is sitting next to B

A is to the right of B and E

'A' is sitting in the third position
from left.

(D)

A's son → B

B married to C

C's sister is D

D is married to E

E and B are brothers

D is daughter in law of A

(A)

Q2

After 8 years

$$\text{Rashid's age} = x + 8$$

$$\text{Father's age} = 3x + 8$$

After 8 years Father Would be 2.5 times Rashid's age:-

$$3x + 8 = 2.5(x + 8)$$

$$3x + 8 = 2.5x + 20$$

$$0.5x = 12$$

$$x = 24$$

$$\text{Rashid's present age} = 24$$

$$\text{Fatr's Present age} = 3 \times 24 = 72 \text{ Years}$$

After another 8 Years (16 years from now)

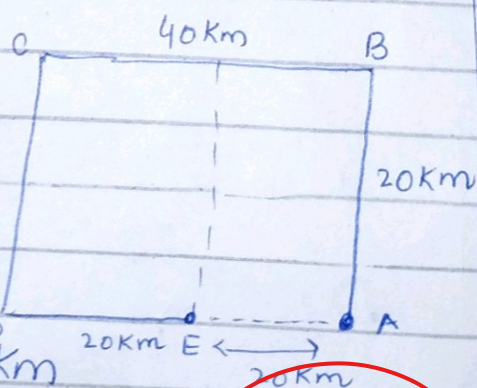
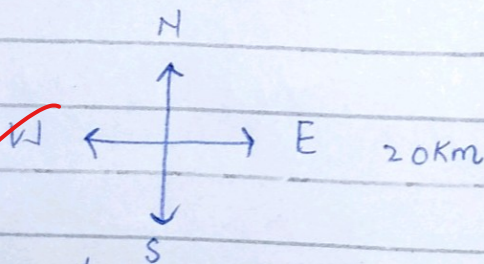
$$\text{Rashid's} = 24 + 16 = 40$$

$$\text{Father's} = 72 + 16 = 88$$

How many times father's age is Rashid's age

$$\text{After further 8 years, father will be of } \frac{88}{40} = 2.2 \text{ times Rashid's age}$$

(B)



20 km towards N

Turns left and Walk 40km

Turns left and Walk 20km

Moves 20 km after Turning to left

Starting point E-A = 20 Km ✓
Facing = East ✓
Total Path = 20 + 40 + 20 + 20
= 100 Km ✓

(c)

City X $\frac{F}{2} = M$

$\therefore \frac{F}{2} = \text{Female}$
 $M = \text{Male}$

City Y $\frac{F}{2} + 5 = M - 10$

$\frac{F}{2} + 5 = \frac{F}{2} - 10$

$\frac{F}{2} - \frac{F}{2} = \frac{10}{2} + 5$

$F \left(\frac{1}{2} - \frac{1}{2} \right) = 15$

Female = 15

Male = $2 \times 15 = 30$

Total = $15 + 30 = 45$

(d)

4 small triangles per section $\times$ 4 Sections
= 16 small triangles

4 larger triangles $\times$ 2 sides = 8 triangles

4 larger even triangles =

Total = $16 + 8 + 4 = 28$ triangles