

NAME: ALINA SYED

BATCH: 401

Question 1

(B) In a code language, KENWOOD is written as RRGWICL then in the same language the word PANASONIC is written as?

GIVEN DATA:

KENWOOD = RRGWICL

REQUIRED DATA:

PANASONIC = ?

SOLUTION:

K	E	N	W	O	D
7↓	13↓	7↓	0↓	6↓	12↓
R	R	G	W	I	C

The only possible pattern that can be there is to follow the above pattern of difference.

P	A	N	A	S	O	N	I	C
7↓	13↓	7↓	0↓	6↓	12↓	8↓	7↓	13↓
N	M	G	A	Y	C	V	P	P

D) A's son B is married with C whose sister D is married to E the brother of B. How D is related to A?

GIVEN DATA:

B is son of A :



B is married with C :



D is sister of C :



D is married to E :

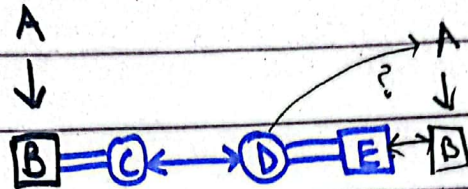


E is brother of B :



Solution:

Flow chart of family will be:



As D is wife of B's brother. So,
E is A's son. D is daughter in
law of A

Result:-

D is daughter in law of A.

Q C) A, B, C, D and E A is sitting?

Given Data:

Five people A, B, C, D and E are
sitting on a bench.

→ A is next to B

→ C is next to D

→ D is not sitting with E

→ E is on left

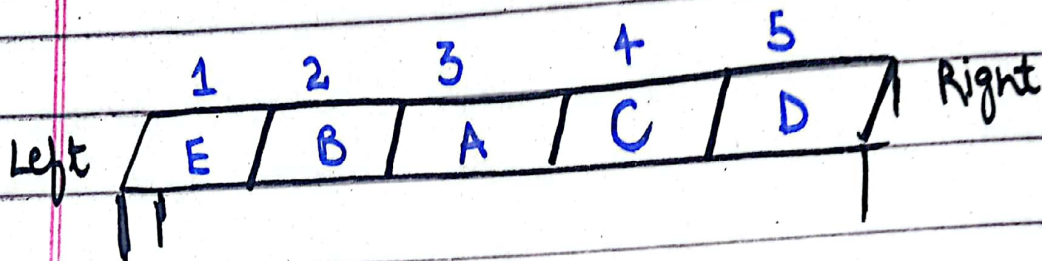
→ C is on second position from right

- A is to right of B and E
- A and C are sitting together

Required Data:

Position of A ?

Solution:



- Position of C is fixed at point 4.
- As A is with C but right to B and E, so, let position of A be 3.
- E is on left and B is with A, so, B will be on 2 and E at 1.
- D is left with position 5.

Result:-

The position of A will be in the mid of B and C.

A) Find the missing term?

a) 3, 9, 21, 39, 63, _____

Solution:

3, 9, 21, 39, 63

Dividing all by 3 we get:

1, 3, 7, 13, 21

If we subtract each next number from previous we get,

2, 4, 6, 8,

So, next number must be divisible by 3 and 8 more than 21
↓
whose answer by dividing with 3,

$$21 + 10 = 31$$

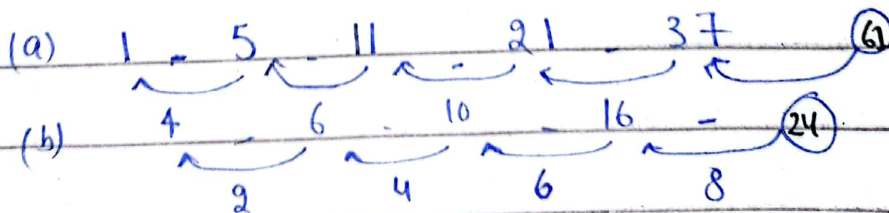
$$31 \times 3 = 93$$

Answer:-

The next number in series is 93

b) 1, 5, 11, 21, 37, _____

Solution:-



$$16 + 8 = 24$$

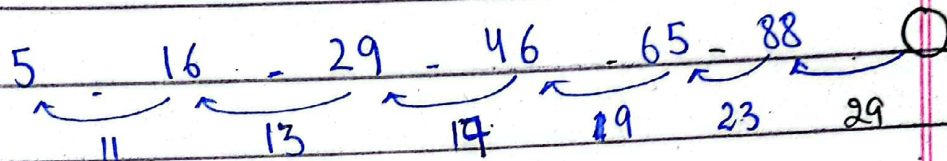
$$37 + 24 = 61$$

Answer:

The next number in series is 61

(C) 5, 16, 29, 46, 65, 88, —

SOLUTION:-



The difference of all numbers
are giving prime numbers, so
next number is:

$$88 + 29 = 117$$

Result:-

Next number in series is 117.

(d) 1, 3, 4, 9, 27, 36, 243, —, 972.

Solution:

1, 3, 4, 9, 27, 36, 243, 729, 972

Result:-

Question- 2

(A) Father age?

Given Data:

Age of father = 3 times of son Rashid's age

After 8 years = 2.5 times of Rashid's age

After further 8 years = ?

Required :-

Age of father after 8 years further
is how many times of son's age?

Solution :-

Present age	Next 8 years	Next 8 years
Rashid age = x	$x+8$	$x+16$
Father age = $3x$	$2.5(x+8)$	$2.5(x+16)$?

After 8 years:-

Rashid's age = $x+8$

Father's age = $3x+8$

But at this time

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

So,

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

$$3x - 2.5x = 20 - 8$$

$$0.5x = 12$$

$$x = \frac{12}{0.5}$$

$$x = \frac{12 \times 10}{5}$$

$$x = 24$$

So current ages are:-

$$\text{Rashid's age } (x) = 24$$

$$\text{Father's age } (3x) = 3(24) = 72$$

After 16 years:-

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

$$\text{Father's age} = 3 \times 24 + 16 = 88$$

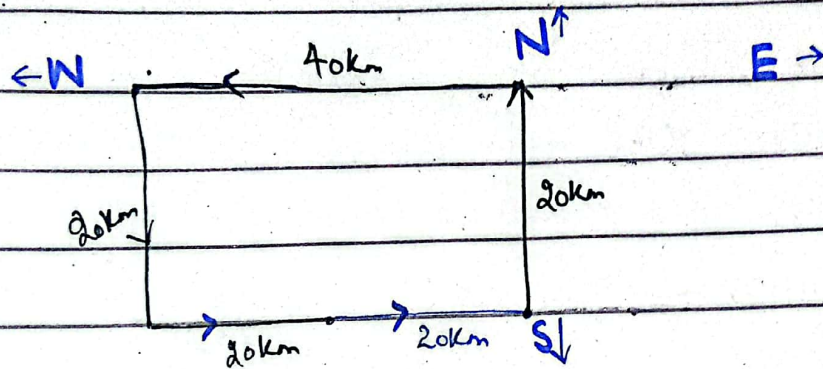
$$\text{Age of father} = \frac{88}{40} = 2.5 \text{ times of son's.}$$

Results:-

Age of father will be 2.5 times
age of Rashid after 16 years.

B) Saleem : ... initial position?

SOLUTION:-



How far is he from starting position?

After the whole travelling, Saleem is 20km far from starting position.

How much path he had travelled?

20km North + 40km left + 20km left + 20km left

So total path is = $20 + 40 + 20 + 20 = 100\text{km}$

In which direction he is moving?

Finally, Saleem is moving towards East.

In which ^{direction} he is from initial position?

Saleem is in West of initial position.

(c) A bus..... bus?

Solution:-

Let x be the number of men in start.

At city X:

$$\text{Men} = x$$

$$\text{Women} = \frac{1}{2}x$$

At city Y:

$$\text{Men} = x - 10$$

$$\text{Women} = \frac{1}{2}x + 5$$

Men = Women at city Y:

$$x - 10 = \frac{1}{2}x + 5$$

$$2x - 20 = x + 10$$

$$x = 30$$

So number of men in start = 30

Number of women in start = $\frac{30}{2} = 15$.

Total passengers in the start = 45

Result:-

In the beginning 45 passengers have entered the bus.

(b) Find figure?

Answer:-

Total number of triangles
are 28.