

Date: _____

Day: _____

Question No: 01

(a) 3, 9, 21, 39, 63 —

Solution:

(b) 1, 5, 11, 21, 37, —

Solution:

1, 5, 11, 21, 37, 61

(c) 5, 16, 29, 46, 65, 88 —

Solution:

5, 16, 29, 46, 65, 88 —

5 16 29 46 65 88, 113
↓ ↓ ↓ ↓ ↓ ↓
11 13 17 19 23 25
+2 +4 +2 +4 +2

"D"

Given data:

- ① A's Son = B
- ② B married to = C
- ③ C's sister D married to = E
- ④ E's the brother of B
and Son of A

Find:

How D is related to A.

Result:

Daughter in-law. as both C and D are sisters and B and E are sons of A.

Section: 2

(A) Given data:

$$\text{Father's age} = 3x + x = 4x$$

After 8 years:

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

$$\text{Father's age} = 4x + 8$$

As per question:

$$4x + 8 = 2.5(x + 8)$$

$$4x + 8 = 2.5x + 20$$

Date: _____

$$4x - 2.5x = 20 \rightarrow 8$$

$$1.5x = 12$$

$$x = 8$$

present:

$$\text{Rashid} = x = 8$$

$$\text{Farhan} = 4x = 32$$

(B)

after 8 years

$$R = 8 + 8 = 16 \text{ yrs}$$

$$F = 32 + 16 = 48 \text{ (Twice)}$$

Given data:

Saleem walks = 20km N

Turns left = walk 40k

Turns left = 20km

Final = 20km more after left.

Find:

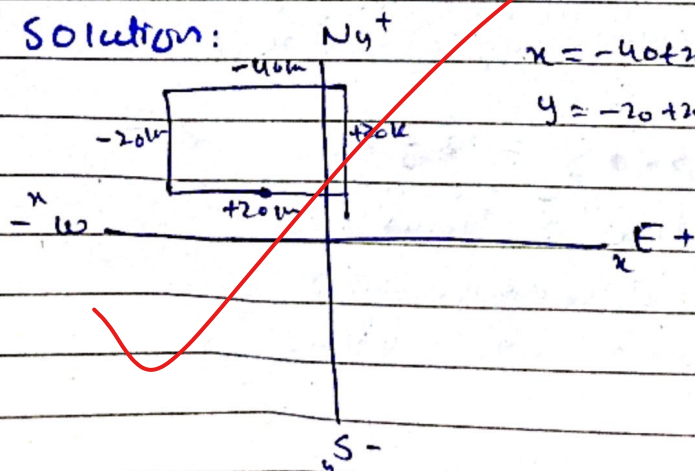
① How far is he from starting position?

② How much path he had covered?

③ In which direction he is moving?

④ In which direction he is from initial?

Solution:



$$x = -40 + 20 = -20$$

$$y = -20 + 20 = 0$$

$$= (x=0, y=+20) \quad (x=-40, y=0)$$

$$x = -40, y = +20 - 20 = x = -40, y = 0 \quad x = -20$$

Date: _____

(c) Final position

$$d = \sqrt{(x)^2 + (y)^2}$$

$$= \sqrt{(-20)^2 + (40)^2}$$

$$= \sqrt{40000}$$

$$d = 200 \text{ km}$$

(d) Total distance:

$$\text{Total} = 20 + 20 + 40 + 20 = 100 \text{ km}$$

(e) Final Direction:

as per final direction he is
moving towards East.

(iv) In which from initial:

Started towards North
and now at the West.

(c)

Conditions Given:

Bus starting from = X city
 Total women = half to men
 men left = 10
 women entered = 5

Find:

Passengers in the start
 of journey in bus

Solution:

according to the conditions
 in the beginning there were:

Men = 30

women = half of men 15

Later:

10 men left the bus = 20 men
 left

Then,

5 women entered in the bus

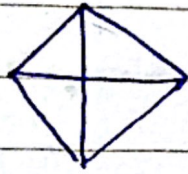
number became = 15 + 5
 = 20

So,

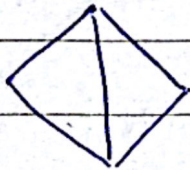
initially there were 45 passengers

Triangles:

Total :



$$= 6 \times 2 = 12$$



$$= 2 \times 2 = 4$$



$$\begin{array}{r} 2 \quad = \quad 2 \\ \hline 18 \end{array}$$