

Q:
A long distance telephone company charges 7 cents per minute or 50 cent minimum for every completed call, whichever is greater. Find the cost of call in cents per minute for 6 minutes?

Solution:

Let
Cost of call for N minutes = x

Variable Cost:

Cost of call per minute = 7 cents

Fixed Cost:

Cost of every completed call = 50 cents

Thus, the expression for cost of call that lasted for N minutes:

$$x = \text{Fixed Cost} + \text{Variable Cost}$$

$$x = 50 + 7(N)$$

For 6 minutes: $N = 6$

$$x = 50 + 7(6)$$

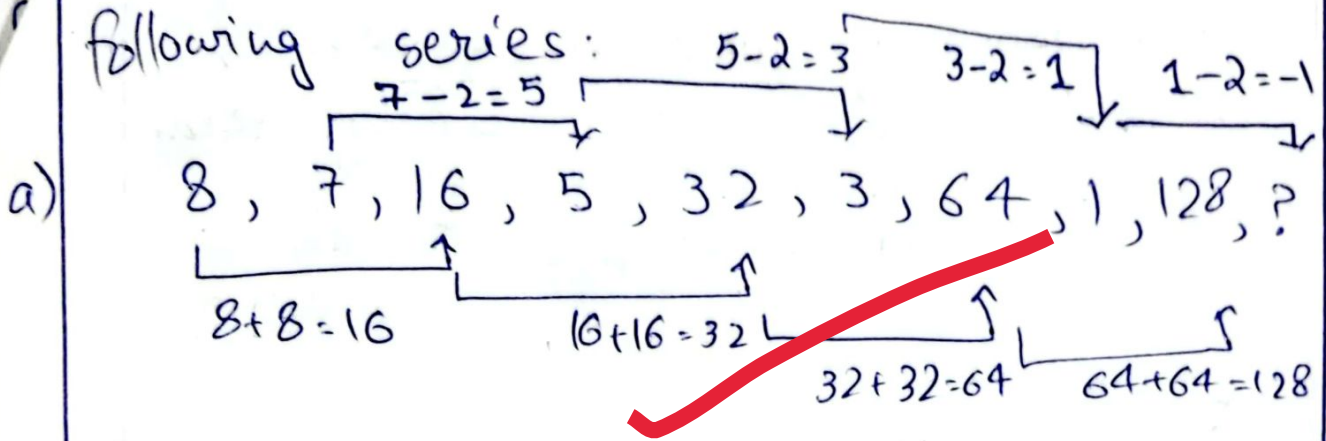
$$x = 50 + 42$$

$$x = 92 \text{ Cents per minute}$$

Cost of call for 6 minutes = 92 cents per minute

A: Q1: Find the missing term in the

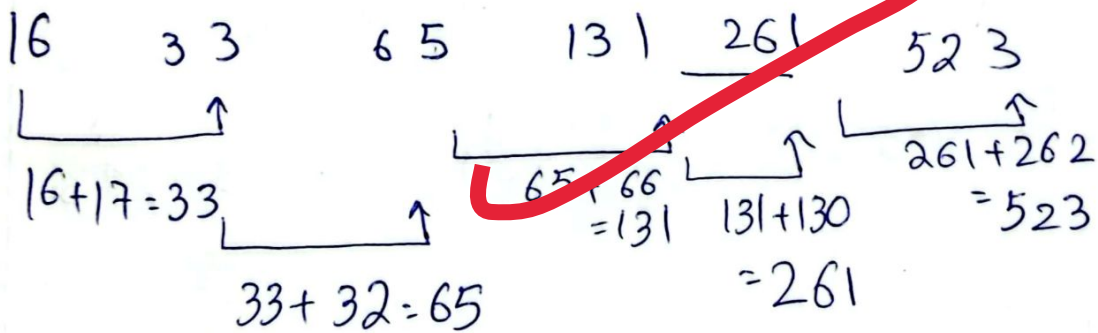
following series:



Thus missing term is $1-2 = \boxed{-1}$

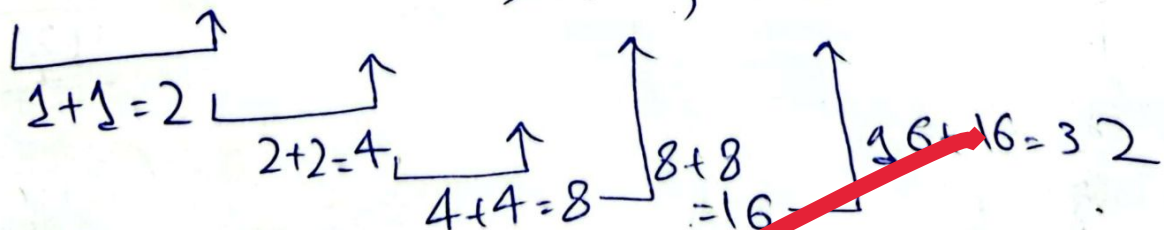
Explain the logic in detail using statements

b) 16, 33, 65, 131, ?, 523



Thus missing term is 261.

c) 1, 2, 4, 8, ?, 32



Thus, missing term is 16.

Q. The following question consists of a number series with a wrong term. Find out wrong term.

a)

6, 8, 9, 12, 14, 18, 22, 26, 30

$6+2=8$ $8+2=10$ $10+2=12$ $12+2=14$ $14+4=18$ $18+4=22$ $22+4=26$ $26+4=30$

$12+2=14$ $14+4=18$ $18+4=22$ $22+4=26$

$8+2=10$ $10+2=12$

$12+2=14$

$14+4=18$ $18+4=22$ $22+4=26$

$26+4=30$

9 is circled and a red checkmark is drawn over the sequence.

b)

3, 7, 9, 28, 27, 84, 8.1, 448, 243

$3 \times 3 = 9$ $9 \times 3 = 27$ $27 \times 3 = 81$ $81 \times 3 = 243$

$7 \times 4 = 28$ $28 \times 4 = 112$ $112 \times 4 = 448$

$28 \times 4 = 112$

$112 \times 4 = 448$

84 is circled and a red checkmark is drawn over the sequence.

84 is wrong term. Here should be 112.

Q Each Question consists of 4 groups. One is different from other 3 in some way. Find the different one.

a) O E D C A Z Y X P N M L U S R Q

A Z Y X is different. Because here should be A Y X W since the pattern in other groups are :

The second term of group is obtained by moving in Backwards and skipping the immediate next alphabet in reverse direction. The third and fourth alphabets of group are immediate next alphabet after second alphabet in reverse direction.

b) S U X B L N Q U B D G K J L N Q

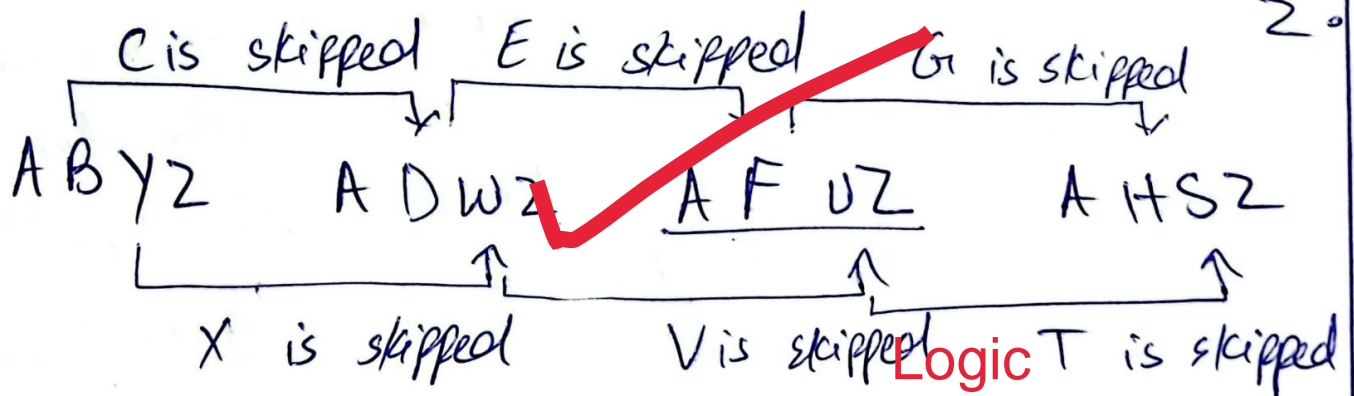
J L N Q is the wrong group. Here J L O S is correct one. Since pattern in other groups is : The second alphabet of group is obtained by skipping immediate next alphabet of the first one. The

The third alphabet is obtained by skipping immediate next two alphabets and 4th alphabet is obtained by skipping immediate next three alphabets - etc.

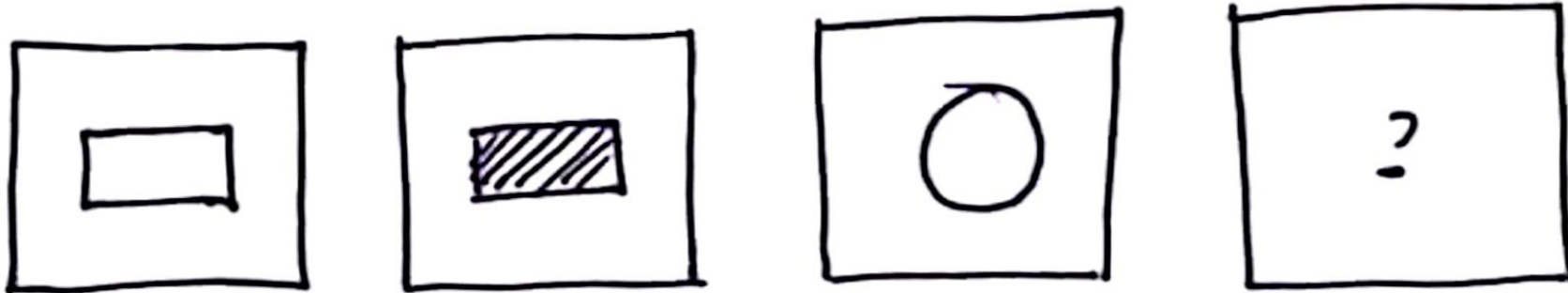
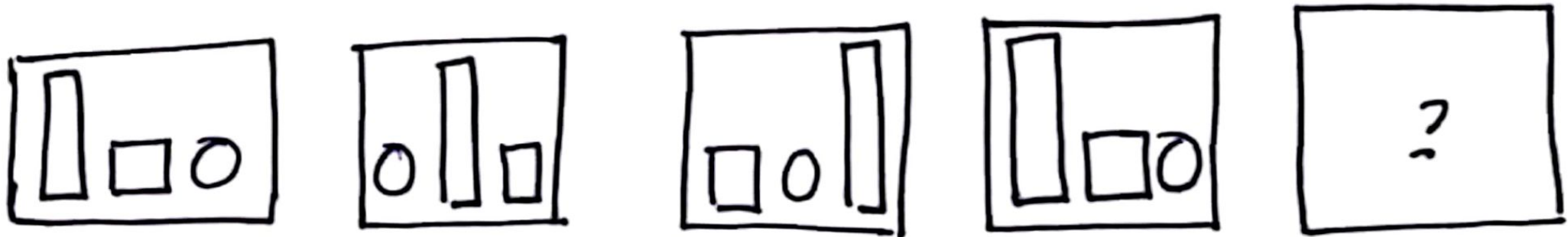
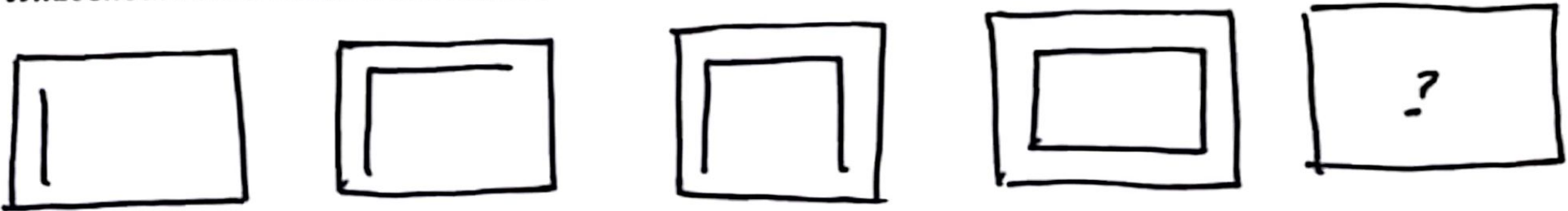
Q: Find the missing term.

ABYZ, ADWZ, ?, AHSZ

First and last alphabet is the same in each group as A and Z.

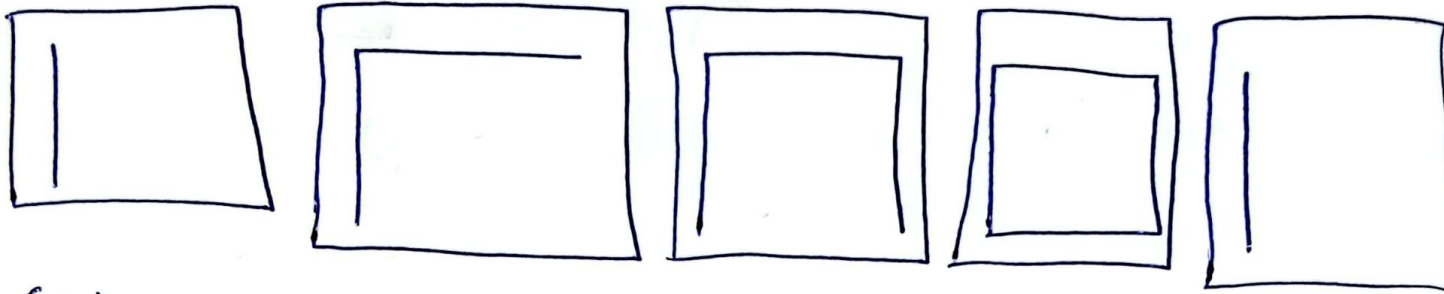


8. What should come next in the series?

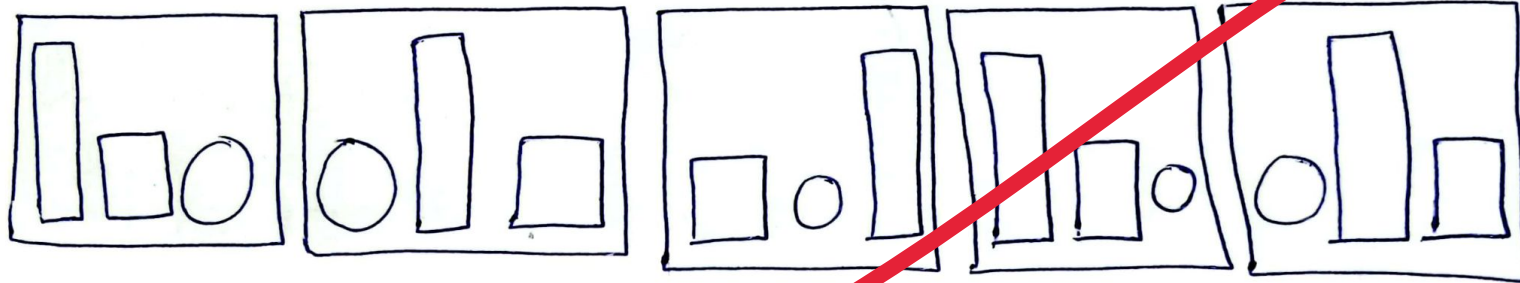


Q8 What should come next in series.

(a)



(b)



(c)

