



Step II

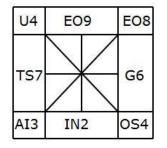
Step III

| U7 | IM6 | NV7 |
|-----|-----|-----|
| CX6 | | EU3 |
| X3 | GE5 | OE4 |

| Т9 | JL8 | OW4 |
|-----|-----|-----|
| DY3 | | DT5 |
| Y1 | HD3 | ND6 |

| OE6 | GC6 | Z2 |
|-----|-----|-----|
| EU2 | | CX6 |
| PV3 | KM5 | U4 |

Input:



1. In step II, which of the following letter/number occur more than twice?

- A. 5
- В. р
- **C.** 4
- D. 4 and 6
- **E. R**

2. In Step III, what is the product of the sum of numbers in the first column and the sum of numbers in the third column?

- A. 124
- **B. 78**
- **C. 84**
- D. 108
- E. None of these

3. In Step II, what is the difference between the sum of numbers in the first row and the sum of numbers in the second row?

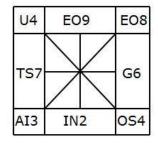
A. -2

- **B.** 7
- C. 2
- D. 9
- E. 3

4. In Step III, what is the sum of numbers in the third row?

- A.9
- **B.8**
- C.17
- D.15
- E.12

Input:



Step I

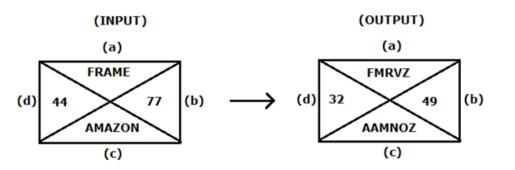
Step II

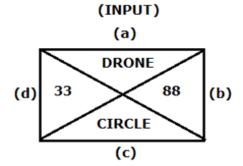
| Step | TTT |
|------|-----|
| Step | TTT |

| OS4 | IN2 | AI8 |
|-----|-----|-----|
| G6 | | TS7 |
| EO3 | EO9 | U4 |

| PR | 5 JM | 14 | BJ5 |
|----|------|----|-----|
| H4 | 8 | | UT4 |
| DN | 5 FP | 6 | T6 |

| U4 | GQ3 | EO2 |
|-----|-----|-----|
| VS6 | | 12 |
| CK2 | IL7 | QS3 |





1. Which of the following letters represents the element of triangle (a) of the output figure?

A.DLNRV

B.DLRNV

C.DENOR

D.RONED

E. None of these

2. What is the sum of the numbers obtained in the triangle (b) and triangle (d) of the output figure?

A. 127

B. 117

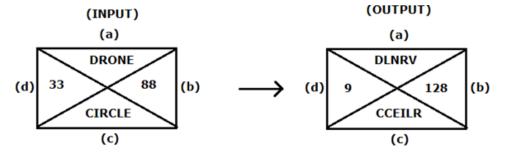
C. 107

D. 137

E. None of these

3. Which of the following letters represents the element of triangle (c) of the output figure?

A.CCEILR B.CCELRI C.ECEILR D.CCEIRL E.None of these



Explanation

For Words – if the sum of the place value of all the letters of the word is divisible by 5 then the letter of the word is arranged in the English alphabetical order, but if the sum of the place value of all the letters of the word is not divisible by 5 then the alphabet of the word arranged in the alphabetical order after changing the vowel by its opposite letter in the alphabetical order.

For Numbers- if the given two digit number are divisible by both 4 and 11 then number is changed by the resultant of their sum of the square of each digit, but if the sum of the digits of the given two digit number is not divisible by both 4 and 11 then the number is replaced by the multiplication of the digits within the number.

| Input: | Land | 73 | 59 | Tent | 35 | Shut | Born | 67 | Find | 91 | |
|---------|------|------|------|------|------|------|------|------|------|------|--|
| Step 1: | 37 | Land | 73 | 59 | Tent | Born | 67 | Find | 91 | Sh≬t | |
| Step 2: | B¥m | 37 | Land | 73 | Tent | 67 | Find | 91 | Shot | 61 | |
| Step 3: | 69 | B¥rn | 37 | Land | 73 | Tent | 91 | Sh¢t | 61 | Fend | |
| Step 4: | T∙nt | 69 | B¥m | 37 | Land | 91 | Sh¢t | 61 | Fond | 75 | |
| Step 5: | 93 | T∙nt | 69 | B¥m | 37 | Sh≬t | 61 | Fond | 75 | Lønd | |
| | | | | | | | | | | | |
| Input: | Thin | 83 | Bush | 57 | Jack | 23 | 75 | Rest | 41 | Grow | |

4. In which of the following step of the given input, the element "83 Jack 75" occurs in the same order?

A. Step 2 B. Step 4 C. Step 3 D. Step 1 E. Cannot be determined

5. How many elements are there between '43' and '59' in step 4 of the given input? A. Three B. Four C. Seven D. Six E. None of these

6. Which of the following element is fourth to the right of '59' in step 3 of the given input? A. 83 B. Jack C. 75 D. Rest E. None of these

7. Which of the following option is correct with respect to step 5 of the given input? A. R^{II}st 59 Gr¥w 25 B◊sh 43

- B. R^{II}st 59 Gr¥w 25 Jøck 83
- C. 85 RIst 59 Jøck 25 Gr¥w
- D. 85 Jøck 59 Th●n 25 B◊sh
- E. None of these

| Input: | Thin | 83 | Bush | 57 | Jack | 23 | 75 | Rest | 41 | Grow | |
|---------|------|------|------|------|------|------|------|------|------|--------------|--|
| Step 1: | 25 | Thin | 83 | 57 | Jack | 75 | Rest | 41 | Grow | B¢sh | |
| Step 2: | Gr¥w | 25 | Thin | 83 | 57 | Jack | 75 | Rest | B¢sh | 43 | |
| Step 3: | 59 | Gr¥w | 25 | 83 | Jack | 75 | Rest | B¢sh | 43 | Th •n | |
| Step 4: | R∙st | 59 | Gr¥w | 25 | 83 | Jack | B¢sh | 43 | Th•n | 77 | |
| Step 5: | 85 | Ract | 50 | GrVw | 25 | RAch | /12 | Then | 77 | Jøck | |

In each step, one number and one word are arranged simultaneously on both the ends. The number and words are alternatively placed on both the ends.

For numbers: The numbers are taken in an ascending order from left to right alternatively with words and in each step, 2 is added to that number after positioning.

For words: The words are taken in reverse alphabetical order with respect to the vowels present in the word (The word having 'u' arranged first, followed by 'o' then 'i' and so on). The vowel letters are replaced with symbols are follows: u=0, $o= \pm$, i=0, e=2, $a= \emptyset$.

Input: 53962 41785 65371 57942 81346 39257

Step I: 96421 86441 66421 96441 86421 96421

Step II: 96864 42141 66964 42141 86964 42121

Step III: 98664 11442 96664 11442 98664 11422

Step IV: 924 1110 922 1110 924 118

Step V: 15 3 13 3 15 10

Step VI: O C M C O J

Input: 37968 63712 52381 41394 19652 82137

7. What is the difference of largest and smallest number in step 5?

- A. 5
- B. 4
- C. 3
- D. 6
- E. None of these

8. What is the sum of the digits of the largest number in step 4?

- A. 7
- **B.** 8
- **C.** 6
- D. 5
- E. None of these

9. What is the product of digits of 3rd smallest number in step 3?

- A. 4608
- B. 4
- C. 72
- D. 5184
- E. None of these

Input: 37968 63712 52381 41394 19652 82137

Step I: 98662 66211 84211 94421 96411 86211

Step II: 98662 66211 84944 21121 96862 41111

Step III: 98662 11662 98444 11122 98662 11114

Step IV: 922 1114 920 1114 922 11114

Step V: 13 7 11 7 13 8

Step VI: M G K G M H

In Step I, the digits within each number are written in decreasing order from left to right and 1 is subtracted from the prime digits.

In Step II, last three digits of 1^{st} number is replaced by the first three digits of 2^{nd} number. Similarly, last three digits of 3^{rd} number is replaced by the first three digits of 4^{th} number. Same is done with 5^{th} and 6^{th} number.

In Step III, within each numbers, odd digits are written in decreasing order followed by even digits in decreasing order.

In Step IV, leave the odd digits unchanged, sum of even digits is writter in every number.

In Step V, sum of digits within the number is written.

In Step VI, respective alphabets (in the alphabetical series) of each number are written.

Input: omnivory townskip premoved mudworts aldoxime gumlands

Step I: moinovyr piksnwot devomerp strowdum laodixem sdnalmug Step II: oqkpqxat rkmupyqv fgxqogtr uvtqyfwo ncqfkzgo ufpcnowi Step III: fgxqogtr ncqfkzgo oqkpqxat rkmupyqv ufpcnowi uvtqyfwo Step IV: fggqrtxo cfgknqzo kpqqtxao kmpqrvyu cfnpwiou fqtvwyou Step V: fqrtx cfgknqz kptx kmpqrvy cfnpw fqtvwy Step V is the last step of the input.

Find the steps of the following input.

Input: pownding underbit wordgame yawniest biofacts coalmine

10. Which of the following letters don't appear in step IV?

- A. D
- B. Y
- С. Н
- D. I
- E. None of these

- 11. What is the fifth word from the right end in step III?
- A. pwgfdtvk
- B. ipkfpyqr
- C. gpkoncqe
- D. gociftqy
- E. None of these

12. How many times "Q" appears in the last step ?

- A. 2
- B. 3
- C. 4
- D. 5
- E. 6

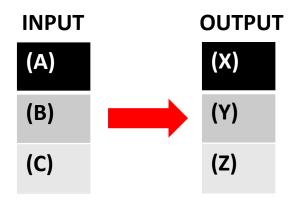
Input: pownding underbit wordgame yawniest biofacts coalmine

- In step I, the letters of the word are reversed if it starts with a consonant and the letters are reversed
- in sets of two letters (i.e. four sets of letters in each word) if the word starts with a vowel.
- Step I: gnidnwop nuedbrti emagdrow tseinway stcafoib enimlaoc
- In step II, each letter of each word is changed to the letter that comes after two successive positions
- alphabetically. For example: 'a' will be changed to 'c', .. 'z' will be changed to 'b'.
- Step II: ipkfpyqr pwgfdtvk gociftqy vugkpyca uvechqkd gpkoncqe
- In step III, the new words formed are arranged in dictionary order.
- Step III: gociftqy gpkoncqe ipkfpyqr pwgfdtvk uvechqkd vugkpyca
- In step IV, the consonants are arranged alphabetically first, followed by the vowels arranged alphabetically within each word.
- Step IV: cfgqtyio cgknpqeo fkppqryi dfgkptvw cdhkqveu cgkpvyau
- In step V, the vowels are removed along with the consonants that appear twice.
- Step V: cfgqty cgknpq fkqry dfgkptvw cdhkqv cgkpvy

Input: Vidya Batch Mains Level Reasoning Content Step 1: Adivy Abcht Aimns Eellv (P) Cennott Step 2: 30 25 (Q) 27 28 27 Step 3: 10 (R) 22 30 30

Based on the below given conditions, output is created:

- 1. If it's an even number in the input, then double it and subtract 5 from it to get the output.
- 2. If it's an odd number in the input, then add sum of its digits and product of its digits to get the output.



Note:

- (A) is the alphabetical place value of the 4th letter in the word (P).
- (B) is the sum of the squared digits of the number (Q).
- (C) is the square of the sum of the digits of the number (R).

19. What is the sum of (A) , (B) and (C) ?

- A. 124
- B. 135
- C. 115
- D. 105
- E. None of these

20. What is the sum of (X), (Y) and (Z)?

- A. 65
- B. 72
- C. 75
- D. 68
- E. None of these

Logic:

Step 1 – Write the letters in alphabetical order within the word.

Step 2 – Add alphabetical place value of last letter with number of letters in the word.

Step 3 – Product of digits then add them for adjacent numbers.