



Question - A

Shalvi is very innovative math teacher and always plan new games to make her students learn concepts. Today, she has planned a prime number game. She announces the number 2 in her class and asked the first student to multiply it by a prime number and then pass it to second student. Second student also multiplied it by a prime number and passed it to third student. In this way by multiplying to a prime number the last student got 173250. He told this number to Shalvi in class. Now she asked some questions to the students as given below.

1	How many students are in the class?
2	What is the highest prime number used by student?
3	What is the least prime number used by students?
4	Which prime number has been used maximum times?
5	Which prime number has been used minimum times?

Question - B

To enhance the reading skills of grade X students, the school nominates you and two of your friends to set up a class library. There are two sections- section A and section B of grade X. There are 32 students in section A and 36 students in section B.

6	What is the minimum number of books you will acquire for the class library, so that they can be distributed equally among students of Section A or Section B?
7	If the product of two positive integers is equal to the product of their HCF and LCM is true then, the HCF (32, 36) is

Question - C

A seminar is being conducted by an Educational Organization, where the participants will be educators of different subjects. The number of participants in Hindi, English and Mathematics are 60, 84 and 108 respectively

8	In each room the same number of participants are to be seated and all of them being in the same subject. Then what is the maximum number participants that can accommodated in each room.
9	What is the minimum number of rooms required during the event?
10	The LCM of 60, 84 and 108 is

Question - D

On 71th republic day parade, Captain RS Meel is planning for parade of following two group:

- (a) First group of Army troops of 624 members behind an army band of 32 members.
- (b) Second group of CRPF troops with 468 soldiers behind the 228 members of bikers.

These two groups are to march in the same number of columns. This sequence of soldiers is followed by different states Jhanki which are showing the culture of the respective states.

11	What is the maximum number of columns in which the army troop can march?
12	What is the maximum number of columns in which the CRPF troop can march?
13	What is the maximum number of columns in which total army troop and CRPF troop together can march past?

Question - E

Lavanya wants to organize her birthday party. She is very happy on her birthday. She is very health conscious, thus she decided to serve fruits only in her birthday party. She has 36 apples and 60 bananas at home and decided to serve them. She wants to distribute fruits among guests. She does not want to discriminate among guests, so she decided to distribute fruits equally among all.

14	How many maximum guests Shalvi can invite?
15	How many apples and bananas will each guest get?
16	Lavanya decide to add 42 mangoes also. In this case how many maximum guests Lavanya can invite ?
17	How many total fruits will each guest get?
18	If Lavanya decide to add 3 more mangoes and remove 6 apple in total fruits, in this case how many maximum guests Lavanya can invite ?

Question - F

Ashish supplies bread and jams to a hospital and a school. Bread and jam are supplied in equal number of pieces. Bread comes in a packet of 8 pieces and Jam comes in a pack of 6 pieces. On a particular day, Ashish has supplied x packets of bread and y packets of jam to the school. On the same day, Ashish has supplied $3x$ packets of bread along with sufficient packets of jam to hospital. It is known that the number of students in the school are between 500 and 550.

19	How many students are there in school?
20	How many packets of bread are supplied in the school?
21	How many packets of jams are supplied in the school?
22	How many packets of bread are supplied in the hospital?
23	How many packets of jams are supplied in the hospital?

Answers

1	7
4	5
7	4
10	3780
13	4
16	6
19	504
22	189

2	11
5	7
8	12
11	16
14	12
17	6 apple 10 banana and 7 mangoes
20	63
23	252

3	3
6	288
9	21
12	12
15	3 apple 5 banana
18	15
21	84