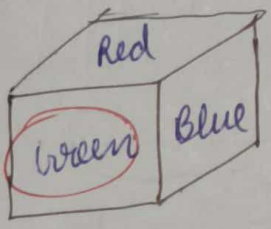
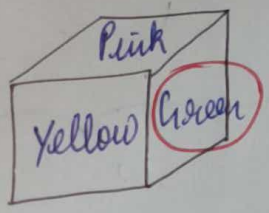
Dice

6 Faces of a Dice are painted with (6) diff colors.

Red	Pink
Green	Yellow
Blue	Brown

2 orientation of the Dice are shown below.





what is the color on the face opposite to Brown colored face? (Green)

Green — ~~Red~~, ~~Blue~~, (Brown), ~~Pink~~, ~~Yellow~~ (Green ko chodkar, sab likhlo)

(Ajeet bhai)

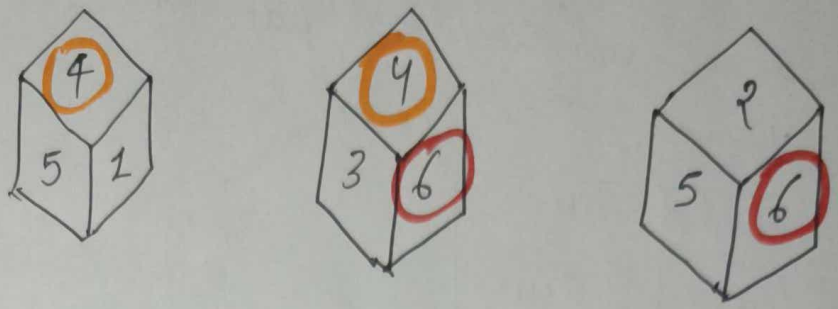
TRICK

To common hai usko likho
fir clockwise cycle chala do

G R B } opposite
G Y P } opposite

(left Brown) [opposite to Green]

Q1



(8) 6 → 1

(9) 5 → 3

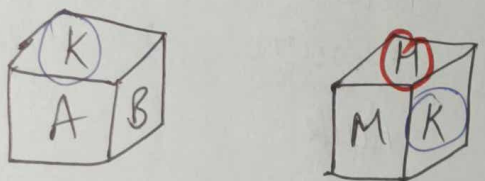
4-2
6-1
3-5

4 — 1 2 3 5 6

6 — 1 2 3 4 5

Ajeet method

Q1



K-P

H-A

K — A B P M

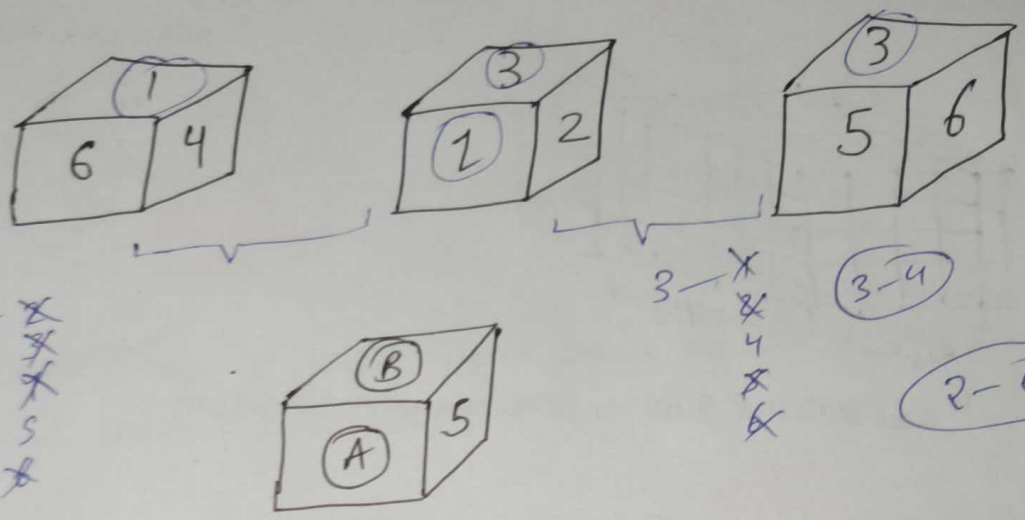
H — A

Ajeet

K A P | B M | A H

B-M

Q11



1 — ~~1~~ ~~2~~ ~~3~~ ~~4~~ 5 ~~6~~

2-5

3 — ~~1~~ ~~2~~ 4 ~~5~~ ~~6~~

3-4

2-6

What possible number exist on (A) and (B)

~~(a)~~ 2 and 3

~~(b) 6 and 1~~

~~(c) 1 and 4~~

~~(d) 3 and 1~~

~~for our Purpose~~

Dice are of two kinds.

① Symmetric

when sum of numbers on opposite pair of faces is same

1 → 6, 2 → 5, 3 → 4

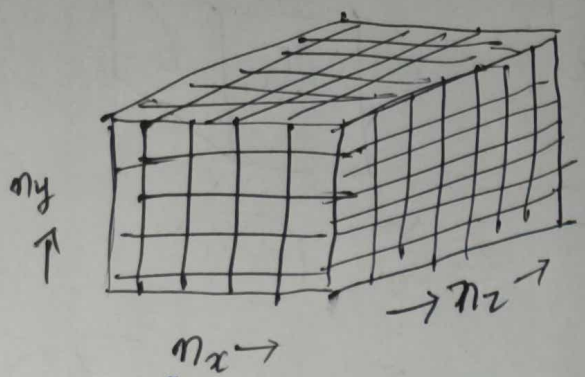
② Asymmetric

when sum of numbers on opposite pair of faces is different.

for ex:

$336 = 6 \times 7 \times 8$

$\downarrow n_x \quad \downarrow n_y \quad \downarrow n_z$



↳ cube is divided into n_x parts along x direction

No. of pieces	Formula
★ 3 face painted (corner pieces)	2^3
★ 2-faces painted	$4[(n_x-2)+(n_y-2)+(n_z-2)]$
★ Only 1-face painted	$2[(n_x-2)(n_y-2)+(n_y-2)(n_z-2)+(n_z-2)(n_x-2)]$
★ Pieces no face painted	$(n_x-2)(n_y-2)(n_z-2)$

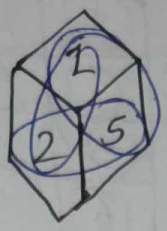
Dices

(1)

3+5 = 8
5+1 = 4
5+1 = 6

Standard dice

(2)



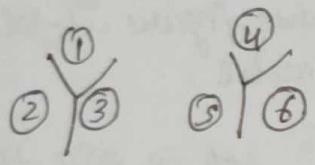
1+2 = 3
1+5 = 6
2+5 = (7)

Non standard dice

* If addition of any one pair is (7) then the dice is Non Standard / General dice

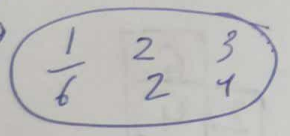
If two faces are given then find opposite pairs.

(1) No common



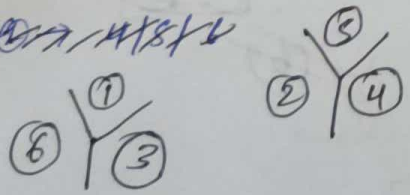
(1) Check whether Standard dice or Non Standard dice

SD ⇒ Arrangement will be fixed



NSD ⇒ ~~cannot be determined~~

~~(2) ⇒ 4/5/6~~

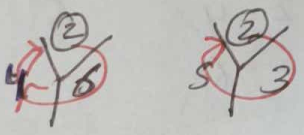


1 → 2/4/5

3 → 2/4/5

6 → 2/4/5

(2) (1) common



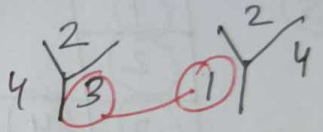
2 6 4

2 3 5

1

{remaining number}

(2) (2) common



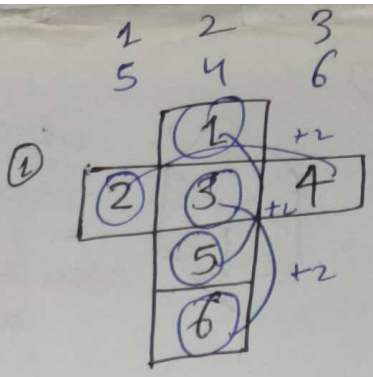
Third no. will be ~~opposite to~~ each other.

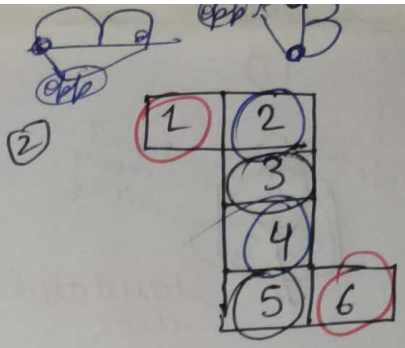
2 — 5/6

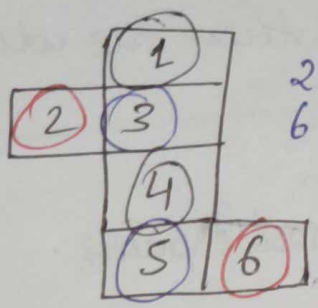
4 — 5/6

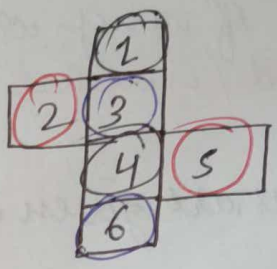
~~1~~ 5 or 6

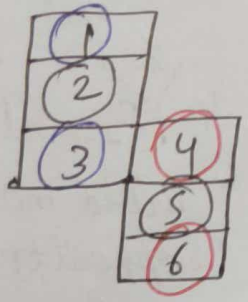
Arrangement of unfolded Dice

① 

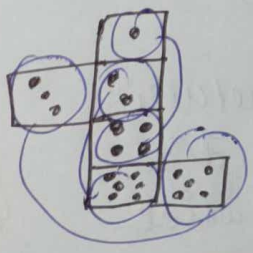
② 

③ 

④ 

⑤ 

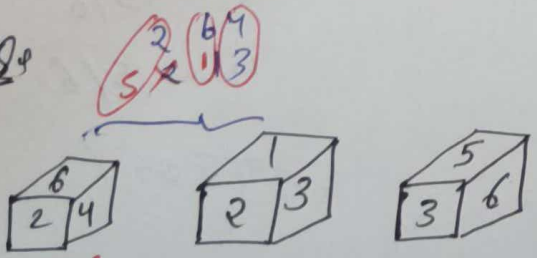
Q: When following figure is folded to form a cube,

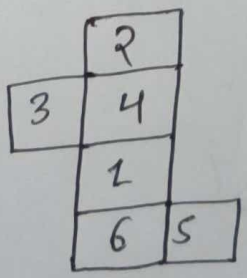


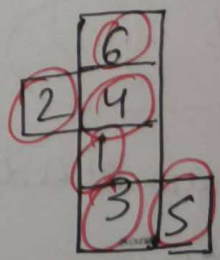
opp to five dots?

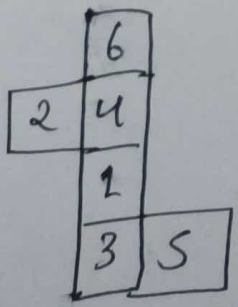
↳ (3)

Q:



(a) 

(b) 

(c) 

(d)