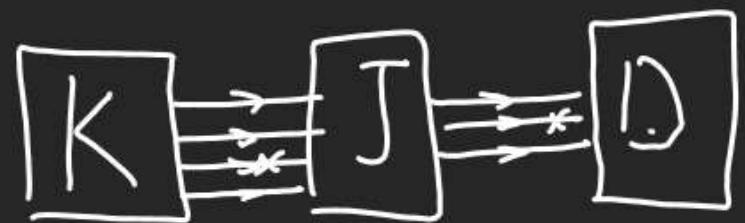


Permutation & Combination

- | | |
|---|---|
| (1) Day 1 - Day 10
hras arghona chaiye. | (7) (half ter finish hone k
bad hi Judge Karen
Compare with your friends. |
| (2) Not Reply if Qs. is
asked in Bet^n. | (8) Doing all types of any IITI
material in a hoax. |
| (3)* <u>No man Ke laddu</u>
Jesamene btaya
vesa Kriye pls. | (9) Pls stick to PnC only
one PnC is started. |
| (4) DPs only | (10) <u>Irregular</u> → |
| (5) DPPs only 30s
(orrect phenymone V-good
20s good, 10s → OK, 00s → Grad head
$> 30s \rightarrow$ Next DPP × P response | |

KJD Model



(1) If a person can go to Delhi from Kota via Jaipur.

$$4 \times 3 = 12$$

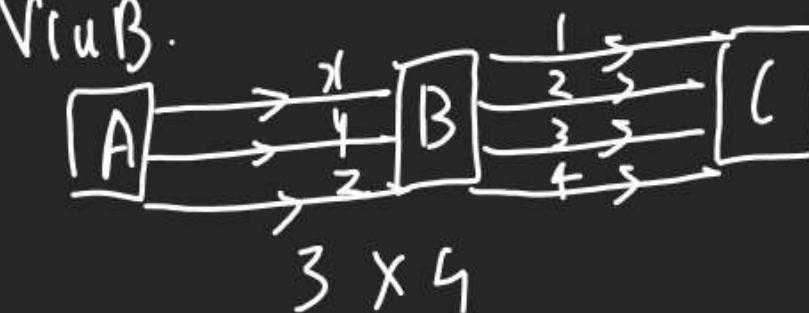
(2) If a person can go to Delhi from Kota & come back to Kota again

$$4 \times 3 \times 3 \times 4 = 144$$

(3) If a person can go to Delhi from Kota & come back to Kota from a different Path.

$$4 \times 3 \times 2 \times 3 = 72$$

Q. There are 3 ways to travel from A to B & 4 ways to travel from B to C. If a person can travel from A to C via B.



$$(x_1, 1) (x_1, 2) (x_1, 3) (x_1, 4)$$

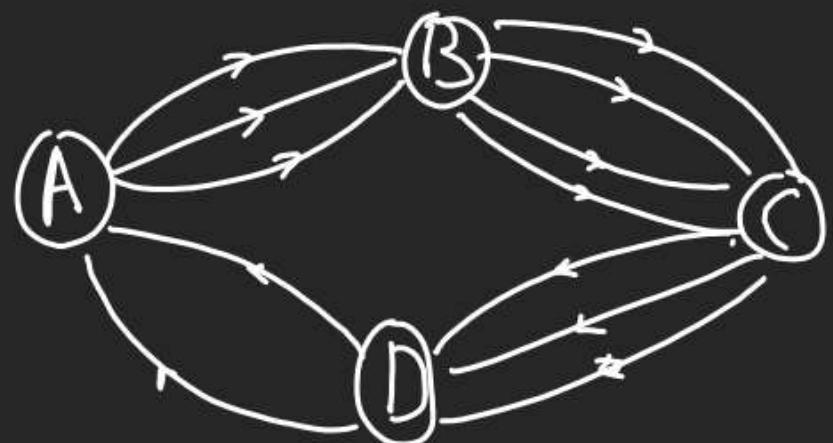
$$(y_1, 1) (y_1, 2) (y_1, 3) (y_1, 4)$$

$$(z_1, 1) (z_1, 2) (z_1, 3) (z_1, 4)$$

120 Paths.

Multiplication Principle

∴

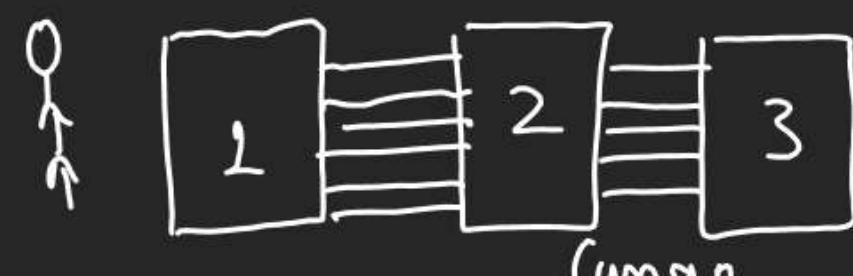


Q In HMI a person can travel from A to C via B or via D.

$$3 \times 4 + 2 \times 3 = 18$$

A → B → C and A → D → C

Station Model



In HMI a person can go from Platform 1 to Plat. 3

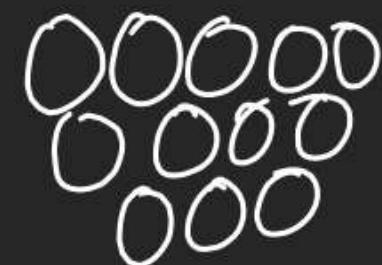
$$6 \times 5 = 30$$



In HMI a person can go to either Pl. 1 or Pl. 3?

$$6 + 5 = 11 \text{ Way}$$

Q 12 Students compete for a Race
No. In which 1st 3 places can be taken.



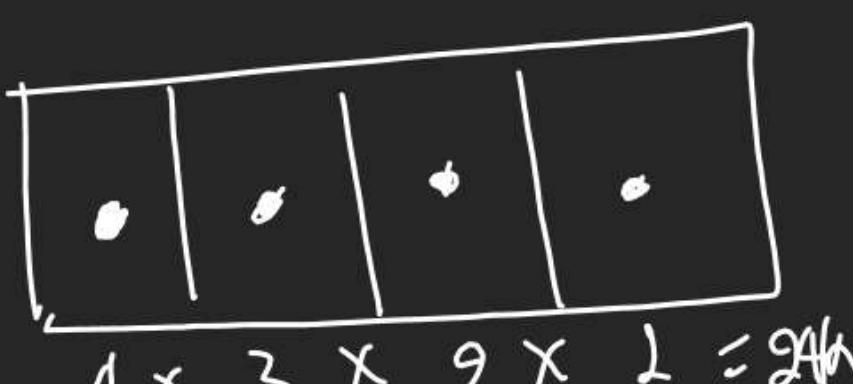
$$1 \text{ Place} \rightarrow 12_{C_1} = 12$$

$$2^{\text{nd}} \rightarrow 11_{C_1} = 11$$

$$3^{\text{rd}} \rightarrow 10_{C_1} = 10$$

$$12 \times 11 \times 10$$

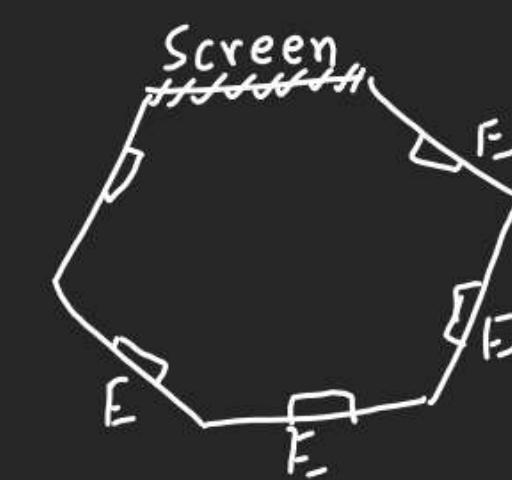
P There are 4 Books one each of Phy, chem, math & Bio. These books need to be arranged in 4 Boxes in H M W they can go. {only one book in one box can be accommodated}



$$4 \times 3 \times 2 \times 1 = 24 \text{ ways}$$

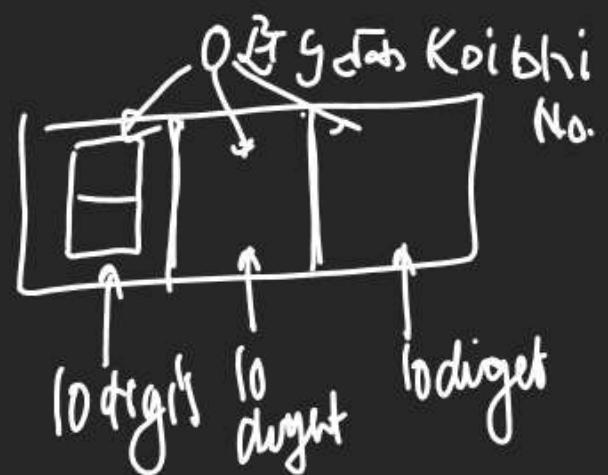
B P C M
B C P M
B M P C
B C M P
B P M C
B M C P
P B C M
P B M C
P C B M
P C M B
P M C B
P M B C

Q There are 4 Ways to enter in cinema hall
85 ways to exit. In H M W a student can watch a movie.



$4_{C_1} \times 5_{C_1}$
 $4 \times 5 = 20 \text{ ways}$

Q A Customer gets a 3 digit code for ATM Pin. Find the Largest Possible No of trials to obtain correct code.



$$10 \times 10 \times 10 = 1000$$

1000 different Pin Possible.