t.me/+5Z3qOg9d2TkWYjJI

Telegram Group.

t.me/gbsirka11thKa group.

Nishant Jindal

Q Find total NO W of

Selecting 5 Letters of

INTERNATIONAL

(II) (NNN) (TT) (AA) _

EROL

5 letter

All D.	$^8C_5$
2A, 3D	$^4C_1 \times {}^7C_3$
2A, 2A, 1D	$^4C_2 \times {}^6C_1$
3A, 2D	$^1C_1 \times {}^7C_2$
3A, 2A	$^1C_1 \times {}^3C_1$

5 D या 2A, 3D या 2A$_1$, 2A$_2$, D या 3A, 2A या 3A, 2D

Q find total NO W. to form 5 letters word from INTERNATIONAL.

$$^8C_5 \times 5! + {}^4C_1 \times {}^7C_3 \times \frac{5!}{2!} + {}^4C_2 \times {}^6C_1 \times \frac{5!}{2!\,2!}$$

$$+ {}^1C_1 \times {}^7C_2 \times \frac{5!}{3!} + {}^1C_1 \times {}^3C_1 \times \frac{5!}{3!\,2!}$$

Nishant Jindal

Q) How many 6 Letter Word can be formed from INTEGRATION if each Word contain 3 Vowels & 3 Consonants.

Vowel	Consonants
I I	T T
O	R
A	N N
E	G

6 L

(1+1+1) (2+1)

3D, 3C या 3D, (2A, 1D)C या (2A, 1D), 3DC या (2A, 1D), (2A, 1D)C

$$= {}^{4}C_3 \times {}^{4}C_3 \times 6! + {}^{4}C_3 \times {}^{2}C_1 \times {}^{3}C_1 \times \frac{6!}{2!} + {}^{1}C_1 \times {}^{3}C_1 \times {}^{4}C_3 \times \frac{6!}{2!} + {}^{1}C_1 \times {}^{3}C_1 \times {}^{2}C_1 \times {}^{3}C_1 \times \frac{6!}{2!2!} +$$

Q) INDEPENDENCE

5 letter Word form?

DD EEEE NNN CPI

fixed

5D + 4D 1A + 3D, 2A + 2D, 3A + 1D 4A + 5A

+ 2A, 2A, 1D + 2A, 3A + 4A, 1D

$$= {}^{6}C_5 \times 5! + {}^{3}C_1 \times {}^{5}C_3 \times \frac{5!}{2!} + {}^{2}C_1 \times {}^{5}C_2 \times \frac{5!}{3!} + {}^{1}C_1 \times {}^{5}C_1 \times \frac{5!}{4!} + {}^{3}C_2 \times {}^{4}C_1 \times \frac{5!}{2!2!} + {}^{2}C_1 \times {}^{2}C_1 \times \frac{5!}{2!3!} +$$

Nishant Jindal

Q NOW of Selecting 5 Letters of

MISSI I

Nishant Jindal

Q NOW of selecting 5 Letters of MISSISSIPPI

(IIII) (SSS) (PP) M

4A, 1D	$^1C_1 \times {}^3C_1$	+	= 3
3A, 2D	$^2C_1 \times {}^3C_2$	+	= 6
2A, 3D	$^3C_1 \times {}^3C_3$		= 3
2A, 2A, 1D	$^3C_2 \times {}^2C_1$	+	= 6
2A, (3A)	$^2C_1 \times {}^2C_1$		= 4

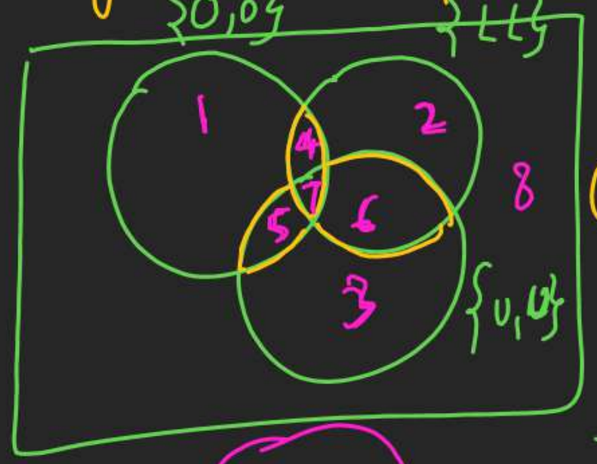
3A phle solve krdi

22

Nishant Jindal

Q HM different words can be formed using all letters of Word HONOLULU.
If No 2 alike words are together.

No of diff. words formed
Using all letters of HONOLULU $= \frac{8!}{2!2!2!} = 5040$



2240

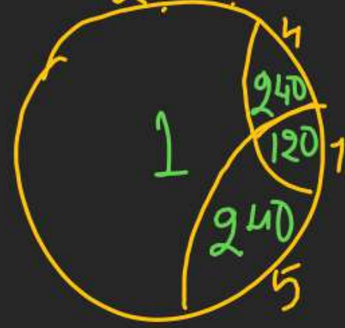
$1+2+3+4+5+6+7+8 = 5040$

(1) $\{(O,O),(LL),(U,U)\}$ = Area 7
$= H\,(OO)\,(LL)\,(UU)\,N = 5!$
$= 120$

(2) Area{4+7} $= H\,(OO)\,(LL)\,U,U,N = \frac{6!}{2!} = 360$

** Area 4 $= 360 - 120 - 240$
$=$ Area 5 $=$ Area 6.

(3) Area{1,4,5,7} $\rightarrow H\,(OO)\,UU\,L\,L\,N$
$= \frac{7!}{2!2!} = \frac{5040}{4} = 1260$



Area 1
$= 1260 - 240 - 240 - 120$

Area 2 = Area 3 = 660

$3 \times 660 + 3 \times 240 + 120 + \text{Area } 8 = 5040$
$\Rightarrow$ Area 8 = 5040