

$$\frac{36 \cdot 35 \cdot 34}{3!} = 7140$$

$$36 \cdot \boxed{nCr} \cdot 3$$

$$= \binom{36}{3}$$

3 parmi 36 ~~ordre~~

3 cartes de même couleur

$$\binom{4}{1} \cdot \binom{9}{3}$$

0 P

1 P

1

$$C_1^4 = 4$$

« Choisir une « main » de 3 cartes »

Total des cas

$$C_3^{36} = 7140$$

□ □ □

$$\frac{36 \cdot 35 \cdot 34}{3!}$$

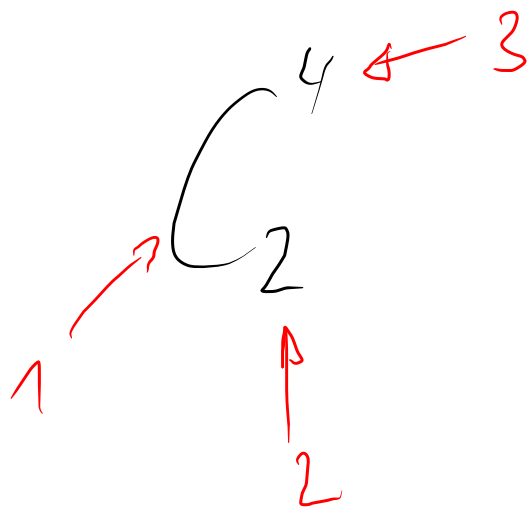
Cas favorables

4 tas de 9 cartes

$$4 \cdot C_1^4 \cdot C_3^9 \cdot \frac{9 \cdot 8 \cdot 7}{3!}$$

choix d'un tas

$$P = \frac{C_1^4 \cdot C_3^9 \leftarrow \text{favorables}}{C_3^{36} \leftarrow \text{total}}$$

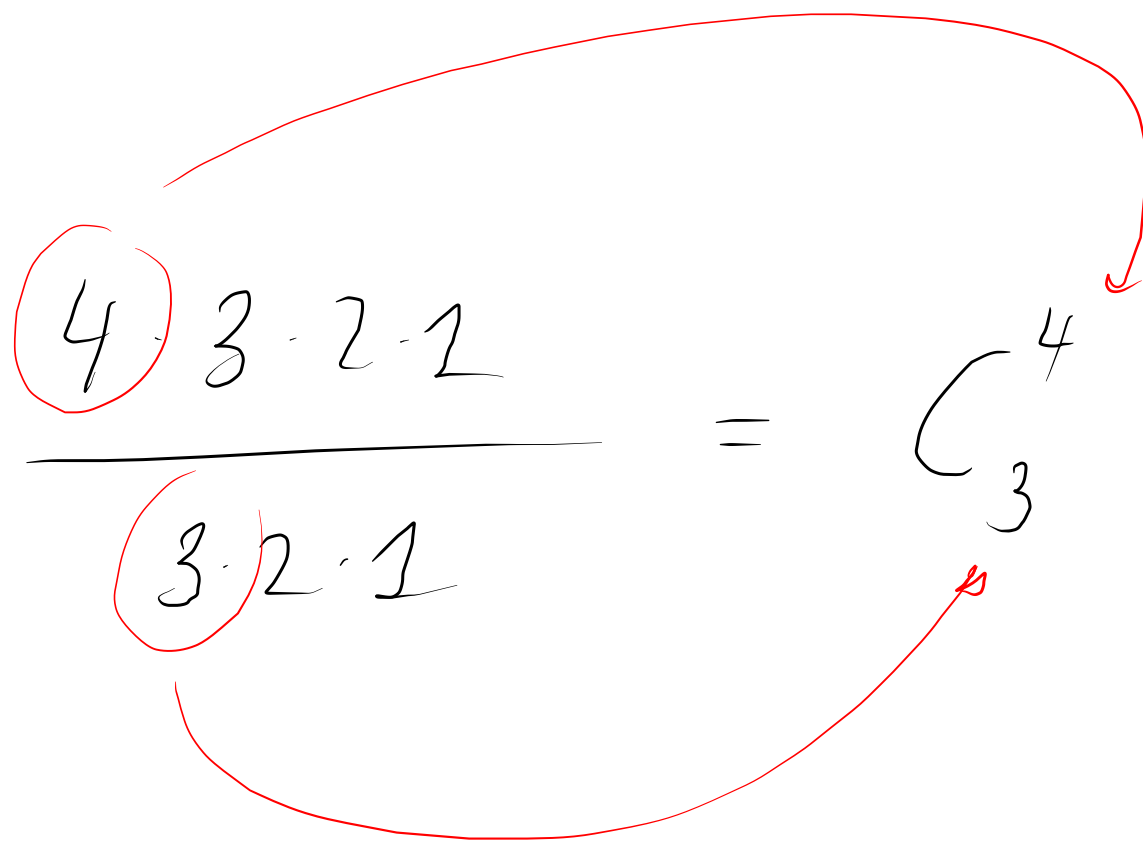


$$4 \boxed{nCr} 2$$

$$C_1^4 = 4$$

$\boxed{\text{cas favorables}}$

$$C_2^4 \cdot C_1^4 = 24$$

$$\frac{4 \cdot 3 \cdot 2 \cdot 1}{3 \cdot 2 \cdot 1} = \binom{4}{3}$$


1V

$$C_1^4 \cdot C_2^{32}$$

2V

$$C_2^4 \cdot C_1^{32}$$

3V

$$C_3^4$$

Cas favorables

total

$$= \frac{C_1^4 C_2^{32} + C_2^4 C_1^{32} + C_3^4}{C_3^{36}}$$

□ □ □ □

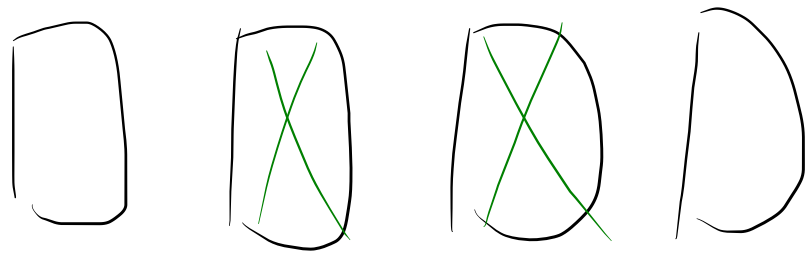
2F / 2P

F₁ F₂ P₁ P₂

4'

□ □ □ □

$$\frac{4 \cdot 3 \cdot 2 \cdot 1}{2 \cdot 1 \cdot 2 \cdot 1} = 6$$



$$C_2^4 = 6$$

684ancers

300 P / 384 F

□

1

□

684

$$\begin{matrix} \text{684} \\ \curvearrowright \\ \text{300} \end{matrix} = \frac{684!}{300! 384!}$$