

Exercício

$$01 - P_8 - P_7 \cdot P_2 = 8! - 7! \cdot 2! = 30.240$$

$$02 - \frac{1}{1} \cdot \frac{1}{5} \cdot \frac{1}{5} \cdot \frac{1}{4} \cdot \frac{1}{3} \cdot \frac{1}{2} \cdot \frac{1}{1} = 5 \cdot P_5 = 5 \cdot 5! = 600$$

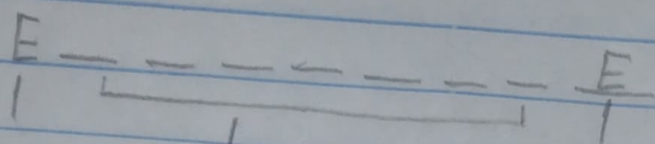
- ↳ Tabela menor o anterior
- ↳ Tabela menor o razão restante
- ↳ Apenas a permutação

D

③ $P_5 = 5! = 120$

(A)

④ MACKENZIE = 9 letras



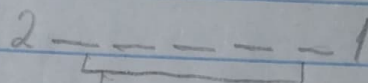
$\hookrightarrow P_7 = 7! = 5040$

(C)

⑤ LONDRES = 7 letras

Vogais {O, E}

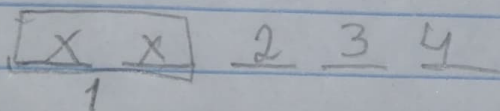
Consoantes {L, N, D, R, S}



$\hookrightarrow 2 \cdot P_5 = 2 \cdot 5! = 240$

(B)

⑥



$P_4 = 4! = 24$

$24 \cdot 2 = 48$

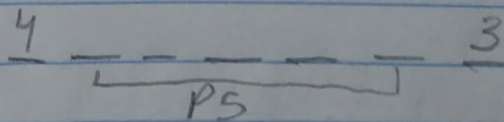
\hookrightarrow palavras invertidas

(B)

⑦ ERNESTO = 7 letras

Vogais {E, E, O}

Consoantes {R, N, S, T}



$4 \cdot 3 \cdot \frac{P_5^2}{2!} = \frac{12 \cdot 5!}{2!} = \frac{1440}{2} = 720$

(B)

⑧ $P_5 - P_4 \cdot P_2 = 5! - 4! \cdot 2! = 120 - 24 \cdot 2 = 72$

(B)

⑨ $P_6^{3,3} = \frac{6!}{3! \cdot 3!} = 20 \hookrightarrow 20 \cdot 3 = 60$

\hookrightarrow As 3 cores

(E)