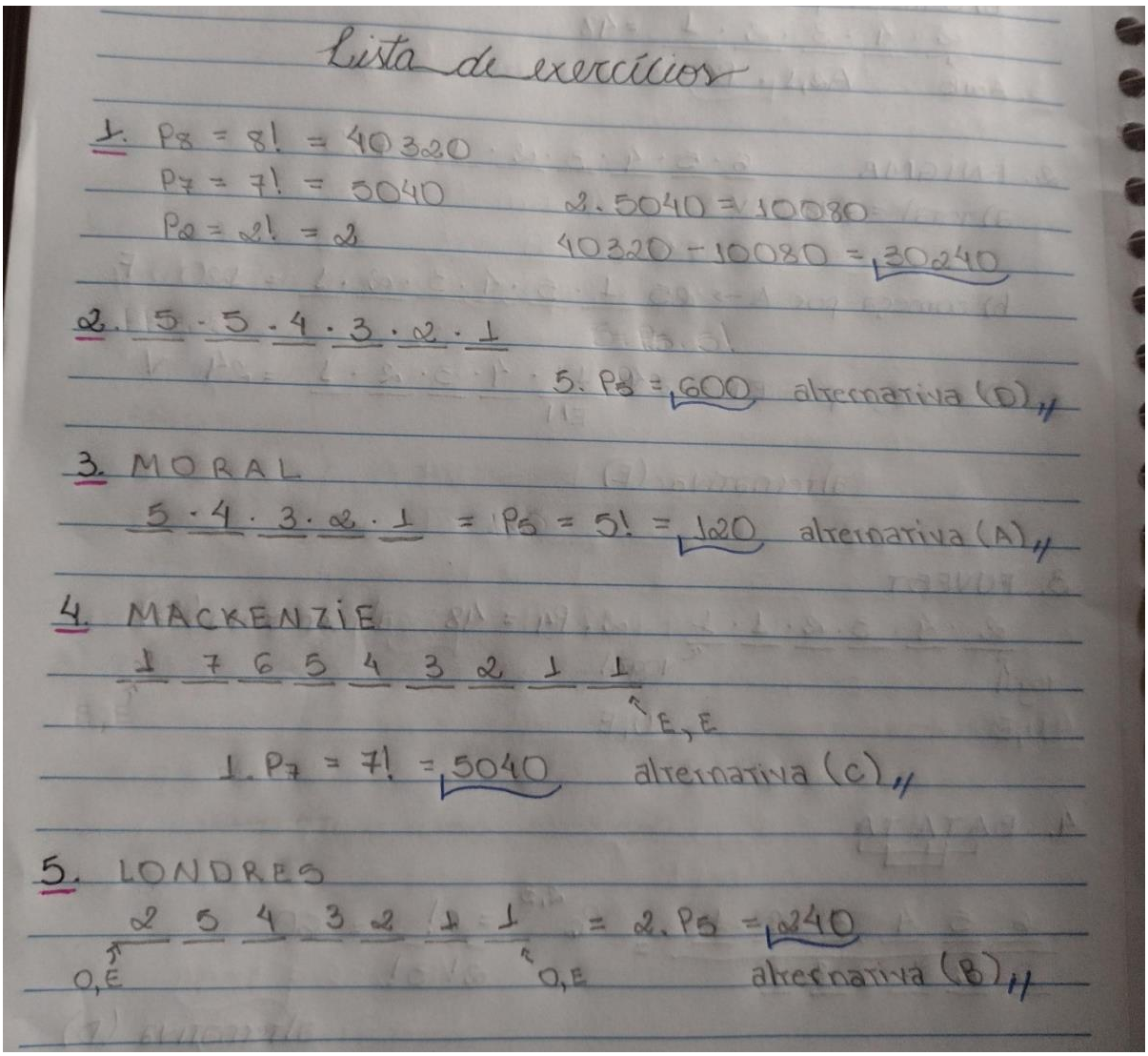
**ALUNO:** Sabrina Vitória Pereira de Souza Ribeiro CTII350



Lista de exercícios

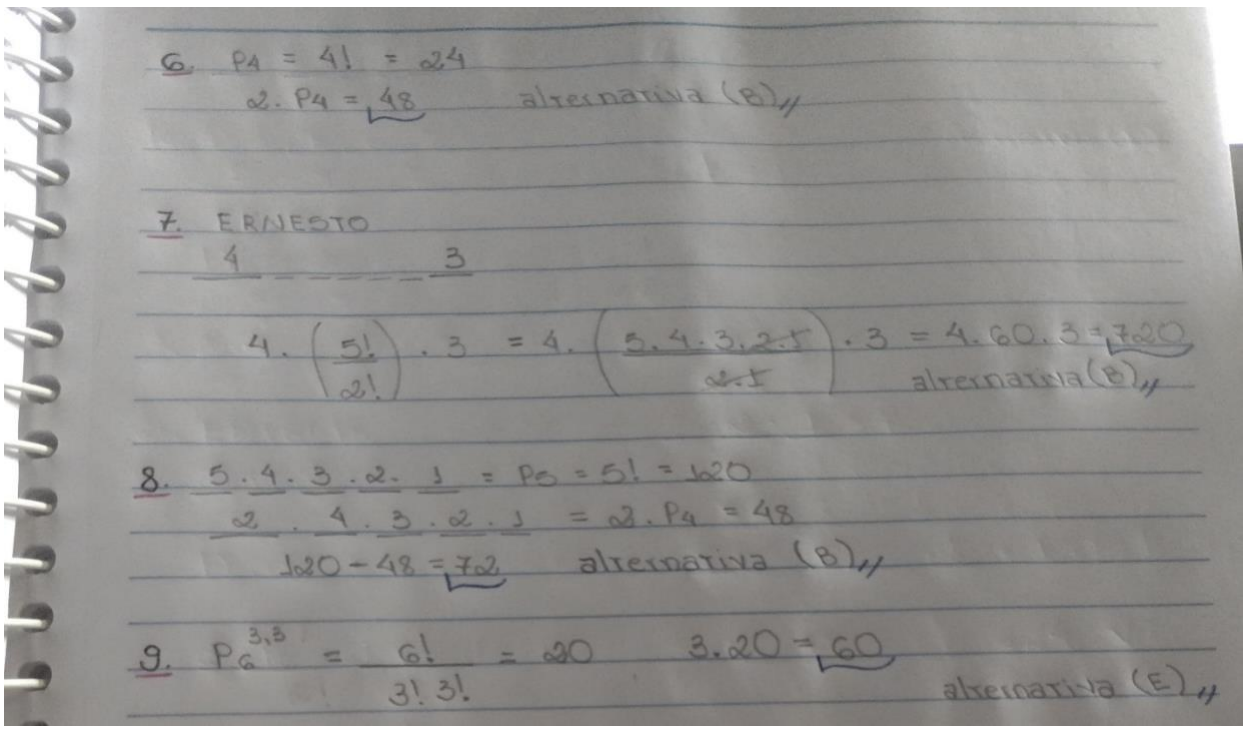
1. $P_8 = 8! = 40320$
$P_7 = 7! = 5040$
$P_2 = 2! = 2$
$2 \cdot 5040 = 10080$
$40320 - 10080 = 30240$

2. $5 \cdot 5 \cdot 4 \cdot 3 \cdot 2 \cdot 1$
$5 \cdot P_5 = 600$ alternativa (D)

3. MORAL
$5 \cdot 4 \cdot 3 \cdot 2 \cdot 1 = P_5 = 5! = 120$ alternativa (A)

4. MACKENZIE
1 7 6 5 4 3 2 1 1
E, E
$1 \cdot P_7 = 7! = 5040$ alternativa (C)

5. LONDRES
2 5 4 3 2 1 1 $= 2 \cdot P_5 = 240$
O, E O, E
alternativa (B)



6. $P_4 = 4! = 24$
$2 \cdot P_4 = 48$ alternativa (B)

7. ERNESTO
4 _ _ _ _ 3
$4 \cdot \left(\frac{5!}{2!}\right) \cdot 3 = 4 \cdot \left(\frac{5 \cdot 4 \cdot 3 \cdot 2 \cdot 1}{2 \cdot 1}\right) \cdot 3 = 4 \cdot 60 \cdot 3 = 720$
alternativa (E)

8. $5 \cdot 4 \cdot 3 \cdot 2 \cdot 1 = P_5 = 5! = 120$
$2 \cdot 4 \cdot 3 \cdot 2 \cdot 1 = 2 \cdot P_4 = 48$
$120 - 48 = 72$ alternativa (B)

9. $P_6^{3,3} = \frac{6!}{3!\,3!} = 20$ $3 \cdot 20 = 60$
alternativa (E)