

Tarefa Básica - Permutações
Pedro - CT II 348

1)

$$8 \cdot 7 \cdot 6 \cdot 5 \cdot 4 \cdot 3 \cdot 2 \cdot 1 = 40320$$

$$\frac{1}{\square} 6 \cdot 6 \cdot 5 \cdot 4 \cdot 3 \cdot 2 \cdot 1 = 4320$$

$\frac{1}{\square} \square \square \square \square$

7 impossibilidades

$$4320 \cdot 7 = 30240$$

2)

$$\frac{1}{\square} 5 \cdot 5 \cdot 4 \cdot 3 \cdot 2 \cdot 1 = 600$$

(D)

3)

M O R A L

$$5 \ 4 \ 3 \ 2 \ \underline{1} \\ 5! = 120 \quad (\textcircled{A})$$

4)

$$\frac{E}{\square} \ \overline{7} \ \overline{6} \ \overline{5} \ \overline{4} \ \overline{3} \ \overline{2} \ \overline{1} \ \underline{E}$$

$$7! = 5040$$

(C)

5)

2 5 4 3 2 1 1

$$5! = 120$$

$$120 \cdot 2 = 240$$

(B)

6)

2 1 3 2 1 = 12
| | | | |

$$12 \cdot 4 = 48$$

(B)

4 possibilities

7)

② R N Q S T O
4 5 4 3 2 1 3

$$4 \cdot 5! / 2! \cdot 3$$

$$4 \cdot 60 \cdot 3 = 720$$

(B)

8) $\underline{\underline{2 \pm 3 \pm}} = 12$

4 possibilidades

$$4 \cdot 12 = 48$$

$$120 - 48 = 72$$

(B)

9)

$$\begin{array}{r} 6 \ 5 \ 4 \\ 9 \ 2 \ \pm \\ \hline 3 \ 2 \ \pm \end{array}$$

18.

repetição
de cores

$$\frac{18 \cdot 6!}{3! \ 3! \ 3!}$$

$$6 \cdot 3 \cdot 6 \cdot 5 \cdot 4 \cdot 3!$$

$$3! \ 3! \ 3!$$

$$5 \cdot 4 \cdot 3 = 60$$

(E)