

Tarefa Básica - Permutações  
Pedro - CT11 348

1)

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

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

7 impossibilidades

$$4320 \cdot 7 = 30240$$

2)

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

L

(D)

3)

M O R A L

5 4 3 2 1

$$5! = 120$$

(A)

4)

E      E  
1 7 6 5 4 3 2 1 1

$$7! = 5040$$

(C)

5)

2 5 4 3 2 1 1

$$5! = 120$$

$$120 \cdot 2 = 240$$

(B)

6)

2 1 3 2 1  
 └──┘ └──┘ └──┘ └──┘

$$= 12$$

4 posibilidades

$$12 \cdot 4 = 48$$

(B)

7)

(2) R N (e) S T O  
 4 5 4 3 2 1 3

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

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

(B)



$$8) \quad \begin{array}{cccccc} & 8! & & & & \\ 2 & \perp & 3 & 2 & \perp & = 12 \\ \hline & 1 & 1 & 1 & 1 & \end{array}$$

4 : posibilidades

$$4 \cdot 12 = 48$$

$$120 - 48 = 72$$

(B)

9)

$$\begin{array}{ccc} 6 & 5 & 4 \\ 9 & 2 & \perp \\ \hline 3 & 2 & \perp \end{array}$$

18

repetición  
de aces

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

$$\frac{6 \cdot 3 \cdot 6 \cdot 5 \cdot 4 \cdot 3!}{3! 3! 3!}$$

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

(E)