Nome: Gustavo Murilo Conceição Carvalho
Turma: CTII348

1- 2 7 6 5 4 3 2 1

$P_8 - P_2 \cdot P_7 = 8! - (2!)(7!) = 40320 - 1080 = 30.240$

2- 1 5 5 4 3 2 1 $= 5 \cdot (5!) = 5 \cdot 120 = 600$ (D)

3- $P_5 = 5! = 120$ (A)

4- 1 7 6 5 4 3 2 1 1 $= P_7 = 7! = 5.040$ (C)

5- 2 5 4 3 2 1 1 $= 2 \cdot (5!) = 2 \cdot 120 = 240$ (B)
(O ou E)

6- 2 1 4 3 2 = 2·(4!) = 2·24 = 48 (B)

7- 4 5 4 3 2 1 3 # E se repete

$4 \cdot 3 \cdot P_5^2 = 12 \cdot \frac{P_5}{P_2} = 12 \cdot \frac{5!}{2!} = 12 \cdot 5 \cdot 4 \cdot 3 = 12 \cdot 60$
$= 720$ (B)

8- $P_5 - P_4 \cdot P_2 = 120 - 24 \cdot 2 = 120 - 48 = 72$ (B)

9-

$3 \cdot P_6^{3,3} = 3 \cdot \frac{6!}{3!3!} = 3 \cdot \frac{6 \cdot 5 \cdot 4}{3 \cdot 2} = 3 \cdot 2 \cdot 5 \cdot 2 = 6 \cdot 10 = 60$ (E)

3 → Colar no meio