

Prob. C. Atuais I - lista 3

$$\underline{3.1:} \quad {}_{10}A_3 = \frac{10 \cdot 9 \cdot 8 \cdot \cancel{7!}}{\cancel{7!}} = 720$$

$$\underline{3.2:} \quad {}_{10}A_4 = \frac{10 \cdot 9 \cdot 8 \cdot 7 \cdot \cancel{6!}}{\cancel{6!}} = 5040$$

$$\underline{3.3:} \quad \underline{20 \cdot 19 \cdot 18} = 6840$$

$$\underline{3.4:} \quad \underline{5 \cdot 5 \cdot 5 \cdot 5} = 625$$

$$\underline{3.5:} \quad 021$$

$$\underline{3 \cdot 3 \cdot 3 \cdot 3} = 81$$

$$\underline{3.6:} \quad 10^6 = 1000.000 \quad \left\{ \begin{array}{l} 62^6 \\ 10^6 \end{array} \right.$$
$$62^6 = 56.800.235.584$$

$$\underline{3.7:} \quad \binom{11}{4} \binom{7}{3} = 330 \cdot 35 = 11.550$$

$$\underline{3.8:} \quad \binom{3}{1} \binom{7}{4} \binom{10}{4} \binom{6}{2} = 661.500$$

$$\underline{3.9:} \quad \binom{10}{3} = 120$$

$$\underline{3.10:} \quad \binom{8}{6} = 28$$

$$\underline{3.11:} \quad 3^4 = 81$$

$$\underline{3.12:} \quad {}_5A_3 = \frac{5 \cdot 4 \cdot 3 \cdot \cancel{2!}}{\cancel{2!}} = 60$$