

Tarefa Básica

$$1. P_{5-A_{4,3}} = \frac{120 - 24}{6} = 16$$

$$A_{4,3} \rightarrow \frac{4!}{4-3!} = 4 \cdot 3 \cdot 2 = 24 \quad \bigg| \quad C_{4,2} \rightarrow \frac{4!}{2!(4-2)!} = \frac{4 \cdot 3 \cdot 2!}{2! \cdot 2!} = 6$$

$$2. C_{5,6} \rightarrow \frac{8!}{6!(8-6)!} \rightarrow \frac{8 \cdot 7 \cdot 6!}{6! \cdot 2!} = 28$$

$$3. C_{4,3} \cdot C_{6,2}$$

$$C_{4,3} \rightarrow \frac{4!}{3!(4-3)!} = 4 \quad \bigg| \quad C_{6,2} \rightarrow \frac{6!}{2!(6-2)!} = 15 \quad \bigg| \quad 15 \cdot 4 = 60$$

$$4. \frac{5!}{3!(5-3)!} \rightarrow \frac{120}{12} = 10$$

$$5. C_{6,2} \rightarrow \frac{6!}{2! \cdot 4!} \rightarrow \frac{720}{48} = 15 \quad \bigg| \quad C_{4,2} \rightarrow \frac{4!}{2! \cdot 2!} \rightarrow \frac{24}{4} = 6$$
$$P = 15 \cdot 6 = 90 \quad (C)$$

$$6. C_{4,3} \rightarrow \frac{4!}{3!(4-3)!} = 4 \cdot 4 \cdot 4 = 64 \quad (E)$$

$$7. C_{5,4} \rightarrow \frac{5!}{4!(5-4)!} \rightarrow \frac{120}{24} = 5 \cdot 2 = 10 \cdot 4 = 40$$

$$40 + 4 + 2 + 1 = 47 \quad (E)$$

$$8. C_{6,2} \rightarrow \frac{6!}{2!4!} \rightarrow \frac{720}{48} = 15$$

$$15 \cdot 6 = 90 \quad (D)$$

$$C_{4,2} \rightarrow \frac{4!}{2!2!} \rightarrow \frac{24}{4} = 6$$

$$9. 1^{\circ} C_{10,1} \rightarrow \frac{10!}{1!10!} = 10$$

$$2^{\circ} C_{10,2} \rightarrow \frac{10!}{2!8!} \rightarrow \frac{10 \cdot 9}{2} = 45$$

$$3^{\circ} C_{10,3} \rightarrow \frac{10!}{3!7!} \rightarrow \frac{10 \cdot 9 \cdot 8}{3 \cdot 2 \cdot 1} = 120$$

$$10 + 45 + 120 = 175 \cdot 3 = 525 \quad (A)$$