

Первая проверка решать

задачи

$$1) \frac{5!}{2} = 10 \quad C_5^2 = \frac{5!}{(5-2)!2!} = \frac{5!}{3!2!} = \frac{4 \cdot 5}{2} = 10(v)$$

$$2) P_6 = 6! = 720(v)$$

Вторая проверка решать

задачи

$$1) A_9^6 = \frac{9!}{(9-6)!} = \frac{9!}{3!} = \frac{3! \cdot 4 \cdot 5 \cdot 6 \cdot 7 \cdot 8 \cdot 9}{3!} = 4 \cdot 5 \cdot 6 \cdot 7 \cdot 8 \cdot 9 = 60480$$

$$2) 10 \cdot 11 = 110. \quad A_{11}^2 = \frac{11!}{(11-2)!} = \frac{11!}{9!} = \frac{9! \cdot 10 \cdot 11}{9!} = 10 \cdot 11 = 110$$

$$3) A_8^3 = \frac{8!}{5!} = 8 \cdot 7 \cdot 6 = 336$$

Самостоятельная

3.1) $C_{11}^3 = \frac{11!}{3! \cdot 8!} = \frac{11 \cdot 10 \cdot 9}{1 \cdot 2 \cdot 3} = 165$ 3.2) $C_{10}^6 = \frac{10!}{4! \cdot 6!} = \frac{10 \cdot 9 \cdot 8 \cdot 7}{1 \cdot 2 \cdot 3 \cdot 4} = 210$

4.1) $A_{26}^2 = \frac{26!}{24!} = 26 \cdot 25 = 650$

4.2) $A_{13}^3 = \frac{13!}{10!} = 13 \cdot 12 \cdot 11 = 1716$