

اردین

1) $\binom{9}{4} = \frac{9!}{4!5!}$ | 2) $\binom{12}{0} = 1$ | 3) $\binom{9}{0} = \frac{9!}{0!9!}$ | 4) $\binom{4}{2} 4! \rightarrow 6 \cdot 24 = 144$

5) $\binom{4}{2} 2! \rightarrow 6 \cdot 2 = 12$ | 6) $\binom{4}{2} \frac{3!}{2} \rightarrow 6 \cdot \frac{6}{2} = 18$

7) $\binom{4}{3} 4! \rightarrow 4 \cdot 24 = 96$ | 8) $\binom{4}{2} abcdef \rightarrow 6 \cdot 24 = 144$

9) $od, dc \rightarrow 2 \cdot 2! = 4$ | 10) $\frac{4!}{2} = 12$ | 11) $\binom{4}{2} abf \rightarrow 6 \cdot 2! = 12$
 $144 \leftarrow 24 \cdot 6$

12) $\binom{4}{2} \binom{2}{2} \rightarrow \frac{4!}{2!2!} = 6$ | 13) $\binom{4}{2} \binom{2}{1} \rightarrow 6 \cdot 2 = 12$

14) $a^2 d e n c b f \rightarrow \frac{4!}{2!1!1!1!1!} = \frac{24}{2} = 12$

15) $4! \frac{4!}{2!} \rightarrow 24 \cdot 12 = 288$ | 16) $\frac{4!}{2!} \cdot 2! \cdot 2! \rightarrow 12 \cdot 2 \cdot 2 = 48$

17) $\frac{4!}{2!} \cdot \frac{4!}{2!} \rightarrow 12 \cdot 12 = 144$

18) $4! \cdot 2! \rightarrow 24 \cdot 2 = 48$ | $4! - 2(4! \cdot 2!) \rightarrow 24 - 48 = -24$

19) $4! \cdot 2! \rightarrow 24 \cdot 2 = 48$ | 20) $4! \cdot 2! \rightarrow 24 \cdot 2 = 48$