

$$4! = 4 \times 3 \times 2 \times 1 = \underline{24} \quad 1$$

$$(4-1)! = 3 \times 2 \times 1 = \underline{6} \quad 2$$

$$\frac{(4-1)!}{2} = \underline{3} \quad 3$$

$$\binom{4}{2} \times 2! = \binom{4}{2} \times 2! = \frac{4 \times 3}{2!} \times 2! = \underline{12} \quad 4$$

$$\binom{4}{2} \times (2-1)! = \frac{4 \times 3}{2!} \times 1! = 1 \times 4 = \underline{4} \quad 5$$

$$\binom{4}{2} \times \frac{(2-1)!}{2} = 1 \times 1 = \underline{1} \quad 6$$

$$\binom{4}{3} \times 3! = 4 \times 2 \times 1 = \underline{24} \quad 7$$

$$(a)(b)(c)(d) \rightarrow \text{همه} \rightarrow 4! = \underline{24} \quad 8$$

$$(a)(b)(c)(d) \rightarrow \text{همه} \left. \begin{array}{l} \text{c و d می توانند جای شوند} \\ \text{با هم} \end{array} \right\} 4! \times 2! = \underline{48} \quad 9$$

$$\begin{array}{c} \text{c} \quad \text{d} \\ \text{---} \end{array} \quad \begin{array}{c} \checkmark \quad / \\ \text{برای جایگزینی جایگشت} \end{array} \quad \frac{4!}{2!} = \underline{12} \quad 10$$

$$(a)(b)(c)(d) \rightarrow 4! \times 3! = 24 \times 6 = \underline{144} \quad 11$$

$$\begin{array}{c} \text{c} \quad \text{d} \quad \text{e} \\ \text{---} \end{array} \quad \frac{4!}{3!} = \underline{4} \quad 12$$



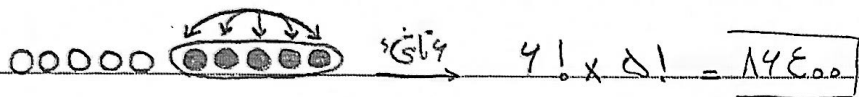
$$\frac{4!}{2!} = \underline{12}$$

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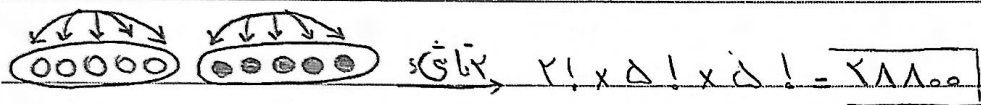
$$\frac{4!}{2! \times 2!} = \underline{18}$$

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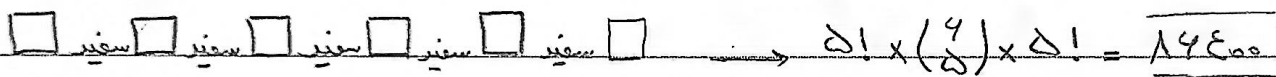
$$4! \times 2! = \underline{14400}$$

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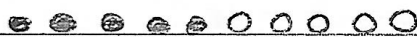
$$2! \times 2! \times 2! = \underline{28800}$$

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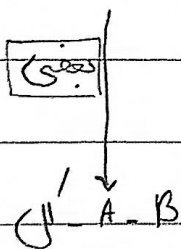
$$2! \times \binom{4}{2} \times 2! = \underline{14400}$$

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سوال ۱۸ ← (A) →
 $4! \times 2! = 14400$



(B) → سوال ۱۷
 $2! \times \binom{4}{2} \times 2! = 14400$

$$10! - \frac{(2 \times 14400)}{172800} = \underline{3584000}$$

چون تعداد دو دسته مساوی → $2! \times 2! \times 2! = \underline{28800}$

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$$2! \times 2! = \underline{28800}$$

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