

Subject: ( )

$$4! = 4 \times 3 \times 2 \times 1 = 24$$

(1)

$$(4-1)! = 3! = 6$$

(2)

$$\frac{(4-1)!}{2} = \frac{3!}{2} = \frac{6}{2} = 3$$

(3)

$$\binom{4}{2} \times 2! = \binom{4}{2} \times 2! = \frac{4 \times 3}{2 \times 1} \times 2 = 6 \times 2 = 12$$

(4)

$$\binom{4}{3} \times 3! = \binom{4}{3} \times 3! = \frac{4 \times 3 \times 2}{3 \times 2 \times 1} \times 6 = 4 \times 3 = 12$$

(5)

$$\binom{4}{2} \times \frac{3!}{2} = 6 \times \frac{6}{2} = 18$$

(6)

$$\binom{4}{3} \times 2! = \frac{4 \times 3 \times 2}{3 \times 2 \times 1} \times 2 = 4 \times 2 = 8$$

(7)

$$(a)(b)(c)(d)(e)(f) \rightarrow 6! = 720$$

(8)

$$(a)(b)(c)(d)(e)(f) \rightarrow 6! \times 2! = 1440$$

(9)

$$\frac{4!}{2!} = \frac{24}{2} = 12$$

(10)

$$(a)(b)(c)(d)(e)(f) = 6! \times 3! = 4320$$

(11)

$$\textcircled{c} \rightarrow \textcircled{d} \rightarrow \textcircled{e} \rightarrow \frac{4!}{3!} = 4$$

(12)

$$\textcircled{c} \rightarrow \textcircled{d} \rightarrow \textcircled{a} \rightarrow \frac{4!}{2!} = 120$$

(13)

$$\textcircled{c} \rightarrow \textcircled{e} \quad \textcircled{d} \rightarrow \textcircled{a} \quad \frac{4!}{2! \times 2!} = 180$$

(14)

$$\textcircled{00} \textcircled{\bullet\bullet\bullet\bullet\bullet} \textcircled{000} \quad 4! \times 3! = 14400$$

(15)

$$\textcircled{000000} \textcircled{\bullet\bullet\bullet\bullet\bullet} \rightarrow 2! \times 5! \times 5! = 216000$$

(16)

$$\begin{array}{c} \bullet\bullet\bullet\bullet\bullet \\ |0|0|0|0|0| \end{array} \quad 5! \times \binom{4}{0} \times 5! = 144000$$

(17)

$$10! - 4! \times 5! - 5! \times \binom{4}{0} \times 5! = 345600$$

(18)

$$2 \times 5! \times 5! = 216000$$

(19)

$$5! \times 5! = 21600$$

(20)