

$$1! \times 4!$$

(1)

$$V! \times \binom{V}{F} \times F! = V! \times \frac{V!}{F!}$$

(2)

$$11! - 1! \times 4! - V! \times \frac{V!}{F!}$$

(3)

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

(4)

$$4! \times 4! \times 2 \times 3! \times 2!$$

(5)

بی تکرار

با تکرار:

$$(4)(4)(3) = 4 \times 1$$

$$(4)(4)(4) = 100$$

(6)

$$\left. \begin{array}{l} (3)(3)(2) = 1 \times 1 \\ (4)(3)(1) = 1 \times 2 \end{array} \right\} \Rightarrow 30$$

$$(4)(4)(3) = 40$$

(7)

$$(3)(3)(2) = 1 \times 1$$

$$(4)(4)(2) = 40$$

(8)

$$\left. \begin{array}{l} (2)(3)(2) = 1 \times 2 \\ (1)(3)(1) = 3 \times 1 \end{array} \right\} \Rightarrow 10$$

$$(2)(4)(3) = 30$$

(9)

$$(1)(3)(2) = 4$$

$$(1)(4)(2) = 10$$

(10)

بی تکرار:

با تکرار:

$$(1)(3)(3) = 9$$

$$(1)(5)(3) = 15$$

(11)

6

$\begin{matrix} 00 & 04 & 12 & 20 & 24 & 32 & 40 & 44 \\ \times & & & & & & & \times \end{matrix}$   
 $(3)(3) = 9$  → 15  
 بدون صفر = 4

00, 04, 12, 20, 24, 32, 40, 44

(12)

$$(4)( ) = 32$$

00, 04, 12, 20, 24, 32, 40

(13)

$$(3)(4) = 12$$

00, 04, 12, 20, 24, 32, 40

$$(4)( ) = 20$$

7

$$\frac{4!}{3! \times 2!}$$

(14)

$$\frac{4!}{3! \times 2!}$$

(15)

$\left. \begin{matrix} 111 \rightarrow 1 & 123 \rightarrow 4 \\ 112 \rightarrow 3 & 133 \rightarrow 3 \\ 113 \rightarrow 3 & 233 \rightarrow 3 \end{matrix} \right\} \Rightarrow 19 \text{ حالت}$

(16)

8

$$\binom{4}{2} \binom{4}{2}$$

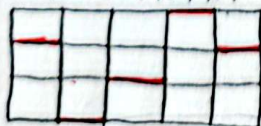
(17)

9

$$\frac{1!}{0! \times 3!}$$

(18)

$$F \times F \times F \times F \times F = F^5$$



$$\frac{F^5}{3}$$

(19)

$$1 \binom{5}{1} + 1 \binom{5}{2} + 3 \binom{5}{3} = 24$$

(20)

10