

۲۰

$$1! \times 4! \checkmark$$

(1) (1)

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

(2) (1)

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

(3) (1)

$$F! \times 4! \times 3! \times F! \times 2! \checkmark$$

(4) (1)

$$F! \times F! \times 2 \times 3! \times 2! \checkmark$$

(5) (1)

بی تکرار

با تکرار:

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

$$(F)(\omega)(\omega) = 1 \times 0 \times 0 \checkmark$$

(6) (1)

$$\left. \begin{array}{l} (3)(3)(2) = 1 \times 1 \\ (F)(3)(1) = 1 \times 1 \end{array} \right\} \Rightarrow 3 \times 0 \checkmark$$

$$(F)(\omega)(3) = 4 \times 0 \checkmark$$

(7) (1)

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

$$(F)(\omega)(2) = 4 \times 0 \checkmark$$

(8) (1)

$$\left. \begin{array}{l} (2)(3)(2) = 1 \times 2 \\ (1)(3)(1) = 3 \times 1 \end{array} \right\} \Rightarrow 1 \times 0 \checkmark$$

$$(2)(\omega)(3) = 3 \times 0 \checkmark$$

(9) (1)

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

$$(1)(\omega)(2) = 1 \times 0 \checkmark$$

(10) (1)

بی تکرار:

با تکرار:

$$(1)(3)(3) = 9 \checkmark$$

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

(11)

(1)

6

$00, 04, 12, 20, 24, 32, 40, 44$   
 $\times$   $(3)(3) = 9$   $\rightarrow 15 \checkmark$   $\times$   
 بدون صفر  $(3)(3) = 9$

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

$$(4)( ) = 32 \checkmark$$

(12)

(1)

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

$$(3)(3) = 12 \checkmark$$

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

$$(4)( ) = 20 \checkmark$$

(13)

(1)

$$\frac{4!}{3! \times 1!} \checkmark$$

(14)

(1)

$$\frac{4!}{3! \times 1!} \checkmark$$

(15)

(1)

$111 \rightarrow 1$	$123 \rightarrow 4$	} $\Rightarrow$ 19 حالت $\checkmark$
$112 \rightarrow 3$	$133 \rightarrow 3$	
$113 \rightarrow 3$	$233 \rightarrow 3$	

(16)

(1)

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

(17)

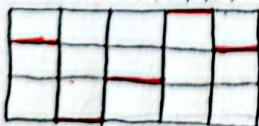
(1)

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

(18)

(1)

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



$$\frac{F^5}{2} \checkmark$$

(19)

(1)

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

(20)

(1)