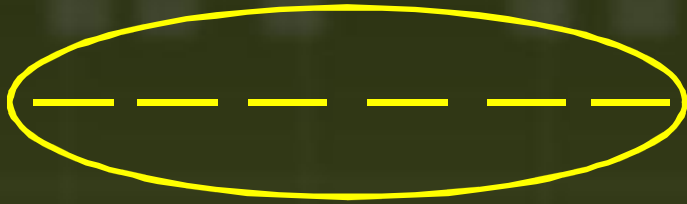


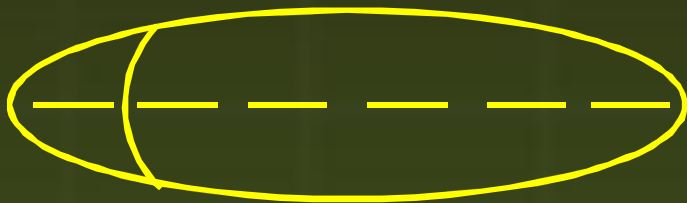
تعداد افرازهای یک مجموعه با اشیاء متمایز:

مثال: تعداد کل افرازهای یک مجموعه ۶ عضوی را بیابید.

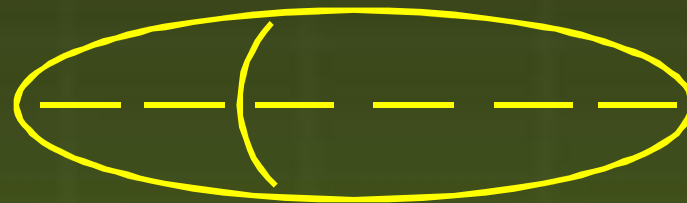
حل:



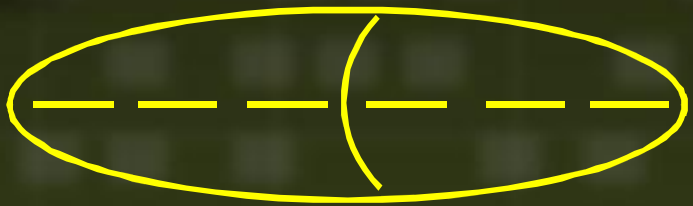
$$1$$



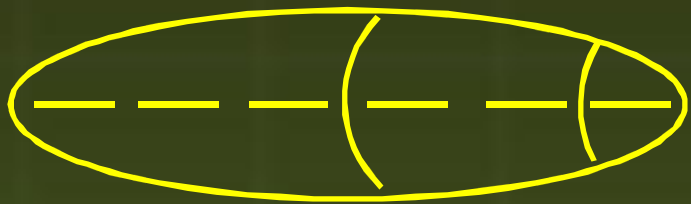
$$\binom{6}{1} = 6$$



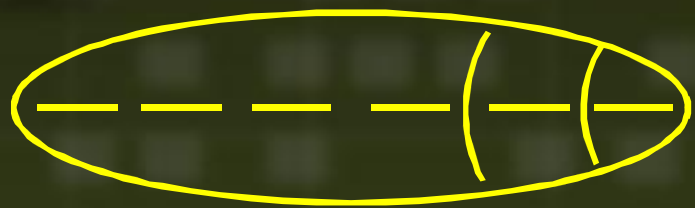
$$\binom{6}{2} = 15$$



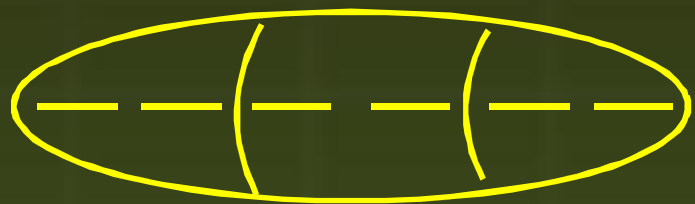
$$\frac{\begin{pmatrix} 6 \\ 3 \end{pmatrix}}{2} = 1 \diamond$$



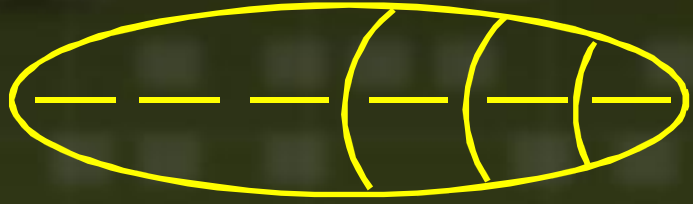
$$\begin{pmatrix} 6 \\ 3 \end{pmatrix} \begin{pmatrix} 3 \\ 2 \end{pmatrix} = 6 \diamond$$



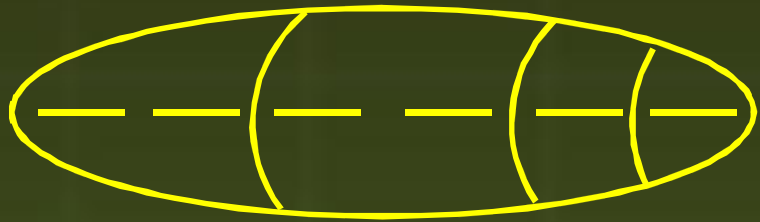
$$\binom{6}{4} = 15$$



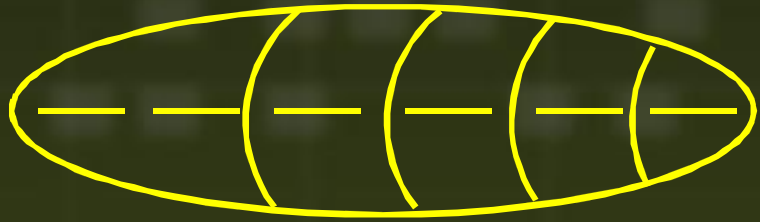
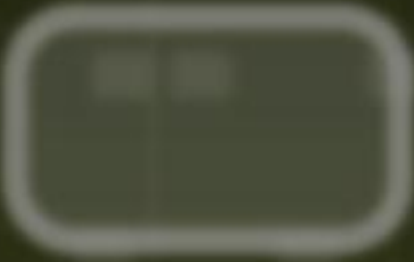
$$\frac{\binom{6}{2} \binom{4}{2}}{3!} = 15$$



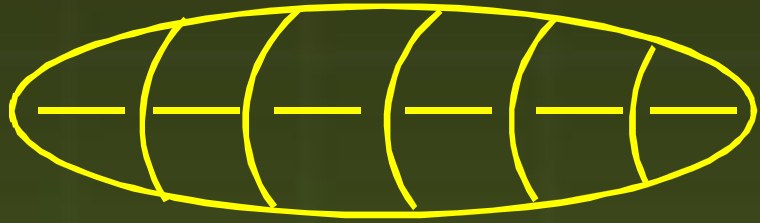
$$\begin{pmatrix} 6 \\ 2 \end{pmatrix} = 2 \diamond$$



$$\frac{\begin{pmatrix} 6 \\ 2 \end{pmatrix} \begin{pmatrix} 4 \\ 2 \end{pmatrix}}{2} = 45$$



$$\binom{6}{2} = 15$$



,