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2014 8 In how many ways can 6 people from a group of 15 people be chosen and then arranged in a circle? **1**

(A) $\frac{14!}{8!}$

(B) $\frac{14!}{8! \times 6}$

(C) $\frac{15!}{9!}$

(D) $\frac{15!}{9! \times 6}$

D

15 choose 6 is $\binom{15}{6}$, or $\frac{15!}{9! \times 6!}$.

$$\begin{aligned} \text{Number of arrangements around a circle} &= \frac{15!}{9! \times 6!} \times 5! \\ &= \frac{15!}{9! \times 6} \end{aligned}$$

State Mean:
0.60

* These solutions have been provided by [projectmaths](#) and are not supplied or endorsed by BOSTES.