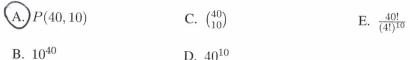
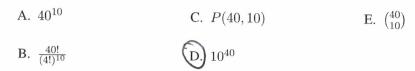


- For questions 16-17: A distributed network has 40 servers.
  - 16. 10 idential copies of a movie will be stored in the network such that each server has at most one copy of the movie. How many ways are there to select where the copies of the movie will be stored?
    - A. P(40, 10) C.  $\binom{40}{10}$  E.  $\frac{40!}{(4!)^{10}}$  B.  $10^{40}$  D.  $40^{10}$
  - 17. 10 different movies will be stored in the network such that each server has at most one movie. How many ways are there to select where the copies of the movie will be stored?



- For questions 18-19: A distributed network has 10 servers. 40 different movies will be stored in the network.
  - 18. How many ways are there to select where the movies will be stored if there is no restriction on the number of movies stored at each server?



- 19. How many ways are there to select where the movies will be stored if the same number of movies are stored at each server?
  - A.  $40^{10}$  C. P(40, 10) E.  $\binom{40}{10}$  D.  $10^{40}$

