

Example Last year, Instacart used their shopping data to determine the most popular pie in each state. Suppose that we take a small sample of residents from CT and MA and ask them whether they prefer apple or blueberry pie. Results are tallied below:

	Blueberry	Apple	Total
MA	16	4	20
CT	2	10	12
Total	18	14	32

- (1) What are the largest and smallest possible values for n_{11} in this problem?
- (2) Use Fisher's Exact test to find the p -value associated with a test of the claim that MA residents are more likely to prefer blueberry pie over apple pie than CT residents.
- (3) What is the p -value for the test if we instead used the mid- p -value approach?