

3. A genetics engineer was attempting to cross a tiger and a cheetah (It's a Chester Cheeger!). She predicted a phenotypic outcome of the traits she was observing to be in the following ratio: 4 stripes only: 3 spots only: 9 both stripes and spots. When the cross was performed and she counted the individuals she found 50 with stripes only, 41 with spots only and 85 with both. According to the Chi-square test, did she get the expected outcome?
4. In the garden pea, yellow cotyledon color is dominant to green, and inflated pod shape is dominant to the constricted form. Considering both of these traits jointly in self-fertilized dihybrids, the progeny appeared in the following numbers:
- 193 green, inflated
 - 184 yellow constricted
 - 556 yellow, inflated
 - 61 green, constricted

Do these genes assort independently? Support your answer using Chi-square analysis.