**4. In the Yucca plant, flower color is determined by a system of incomplete dominance. The genotype BB gives blue flowers, Bb gives lilac flowers, and bb gives white flowers. In a population of yucca plants, 8 had blue flowers, 84 had lilac flowers, and 52 had white flowers.**

**a. What is the frequency of the B allele in this population?**

**b. What is the frequency of the b allele in this population?**

**c. Based upon the Hardy‑Weinberg formula, what proportion of the population is expected to have lilac flowers?**

**d. Based upon the Hardy‑Weinberg formula, what proportion of the population is expected to be of genotype BB?**

**e. Based upon the Hardy‑Weinberg formula, how many individuals in this population would be expected to have white flowers?**