Incomplete and Codominance Worksheet

Answer the following questions. Provide a punnett square to support your answers where indicated. Express probabilities as percentages.

1. Explain the difference between incomplete dominance and codominance:

2. In some chickens, the gene for feather color is controlled by codiminance. The allele for black is B and the allele for white is W. The heterozygous phenotype is known as erminette.
   a. What is the genotype for black chickens? _____
   b. What is the genotype for white chickens? _____
   c. What is the genotype for erminette chickens? _____

3. If two erminette chickens were crossed, what is the probability that:
   a. They would have a black chick? _____%
   b. They would have a white chick? _____%
   Parents: _____ X _____

4. A black chicken and a white chicken are crossed. What is the probability that they will have erminette chicks? _____% Parents: _____ X _____

5. In snapdragons, flower color is controlled by incomplete dominance. The two alleles are red (R) and white (R'). The heterozygous genotype is expressed as pink.
   a. What is the phenotype of a plant with the genotype RR? _____
   b. What is the phenotype of a plant with the genotype R'R'? _____
   c. What is the phenotype of a plant with the genotype RR'? _____

6. A pink-flowered plant is crossed with a white-flowered plant. What is the probability of producing a pink-flowered plant? _____% Parents: _____ X _____

7. What cross will produce the most pink-flowered plants? Show a punnett square to support your answer. Parents: _____ X _____