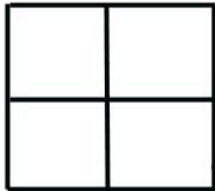


A Punnett square can also be used to predict possible genotypes and phenotypes in offspring for traits that show co-dominance and incomplete dominance.

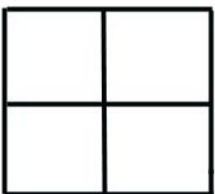
1.) In radishes, colour is controlled by two alleles that show incomplete dominance. When pure-breeding red radishes are crossed with pure-breeding white radishes, purple radishes are produced.

A) Provide the genotypes for the three colours of radishes. _____

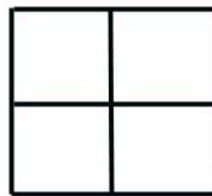
B) What phenotypic ratio is expected when two purple radishes are crossed? _____



2.) A woman who is heterozygous for the sickle cell gene and a man who is homozygous for the normal hemoglobin gene decide to have children. What is the chance that they will have a child with sickle cell disease?



3.) The gene that codes for colour in snapdragons (*Antirrhinum majus*) exhibits incomplete dominance. A true-breeding red snapdragon is crossed with a true-breeding white snapdragon.



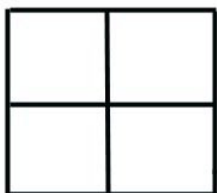
A) What is the phenotype ratio of the F1 generation? _____

B) What is the phenotypic ratio of the F2 generation? _____

4.) Feather colour in chickens is determined by co-dominance. When a white chicken ($H^W H^W$) mates with a black chicken ($H^B H^B$), speckled chickens result.

A) What is the genotype of speckled chickens? _____

B) What are the predicted genotypes of the offspring when two speckled chickens mate? _____



C) What is the predicted phenotypic ratio of the offspring when two speckled chickens mate? _____

5.) Two blue roan horses are bred together. What is the chance that the colt will be white? _____

