Biology Exercise 9 Name_____

1. Perform Punnett Squares for the following six crosses. Indicate the genotypic and phenotypic ratios from each of the crosses

a. Two heterozygous purple-flowered peas (Pp X Pp)
b. One homozygous dominant and one homozygous recessive purple-flowered pea (PP X pp)
c. Two homozygous dominant purple-flowered peas (PP X PP)
d. Two homozygous recessive white-flowered peas (pp X pp)
e. One homozygous dominant and one heterozygous purple-flowered pea
f. One homozygous recessive and one heterozygous purple-flowered pea

2. Determine the genotype of the parents and the offspring in each of the following. (It may not be possible to determine the genotypes of all the parents in each case.)

a. White-flowered pea crossed with a white-flowered pea produces only white-flowered offspring.
b. Purple-flowered pea crossed with a white-flowered pea produces only purple-flowered offspring.
c. Purple-flowered pea crossed with a white-flowered pea produces both purple-flowered and white-flowered offspring.
d. Purple-flowered pea crossed with a purple-flowered pea produces both purple-flowered and white-flowered offspring.
e. Purple-flowered pea crossed with a purple-flowered pea produces only purple-flowered offspring.