

DIIHYBRID GENETICS PROBLEMS

Name _____

- 1 In garden peas, tall (T) vine is dominant over short (t) vine, and round pea pod (R) is dominant over wrinkled pea pod (r). Cross a homozygous tall, round pea plant with a homozygous short, wrinkled pea plant. Show the genotypes and phenotypes of the F₂ offspring, and the probability of each.

_____ Genotype of the homozygous tall, round pea plant

_____ Genotype of the homozygous short, wrinkled pea plant.

Genotypes	Phenotypes

- 2 In garden peas, tall (T) vine is dominant over short (t) vine. Yellow (Y) seed color is dominant over green (y) seed color. Cross a heterozygous tall, yellow seeded plant with a heterozygous tall, yellow seeded plant.

_____ Genotypes of the parent plants

Genotypes	Phenotypes

- _____ What is the probability for a tall offspring?
 _____ What is the probability for a short offspring?
 _____ What is the probability for a yellow offspring?
 _____ What is the probability for a green offspring?
 _____ What is the probability for a tall yellow offspring?
 _____ What is the probability for a tall green offspring?
 _____ What is the probability for a short yellow offspring?
 _____ What is the probability for a short green offspring?