**B9- INHERITANCE**

**9.3- MONOHYBRID INHERITANCE**

**1. Define the terms**

**a. Genotype as** the genetic makeup of an organism in terms of the alleles present (Tt or GG).

**b. Phenotype** as the physical or other features of the organism due to both its genotype and its environment (e.g. tall plant or green seed).

**c. Homozygous** as having two identical alleles of a particular gene (TT or gg). Two identical homozygous individuals that breed together will be pure-breeding.

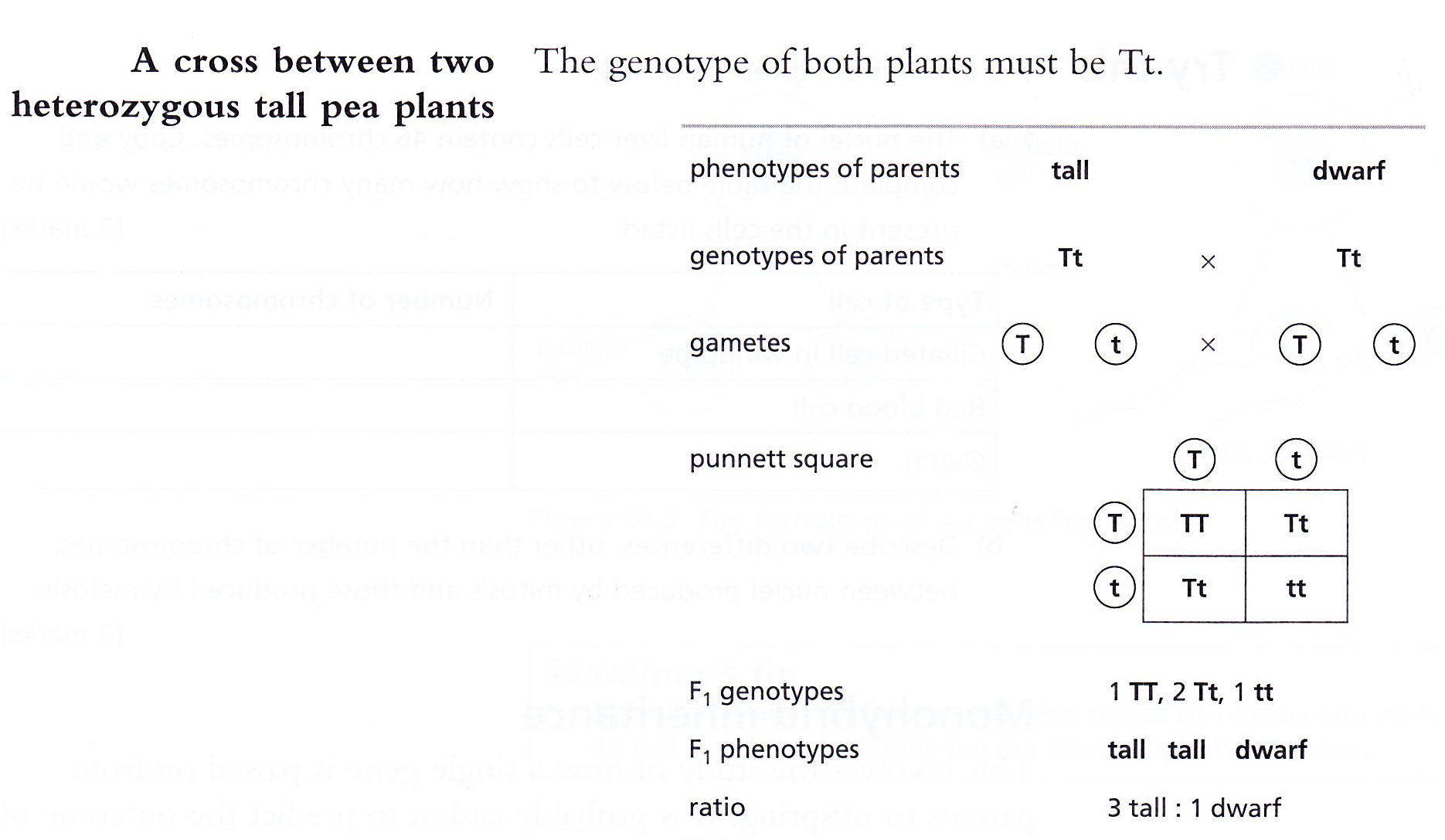
**d. Heterozygous** as having two different alleles of a particular gene (e.g. Tt or Gg), not pure- breeding.

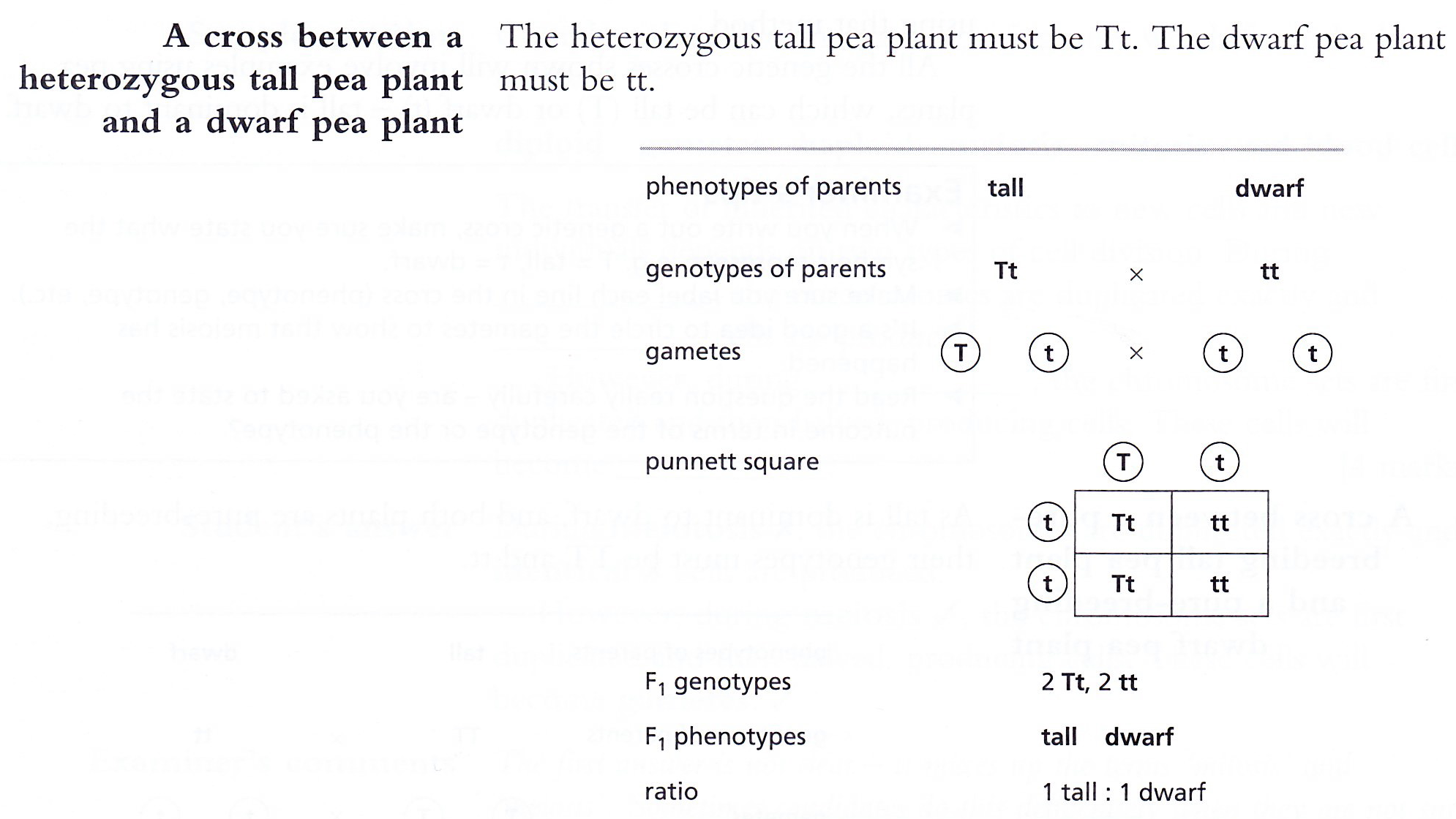
**e. Dominant** as an allele that is expressed if it is present (e.g. T or G).

**f. Recessive** as an allele that is only expressed when there is no dominant allele of the gene present (e.g. t or g).

**2. Calculate and predict the results of monohybrid crosses involving 1:1 and 3:1 ratios.**

Monohybrid inheritance involves the study of how a single gene is passed on from parents to offspring.

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