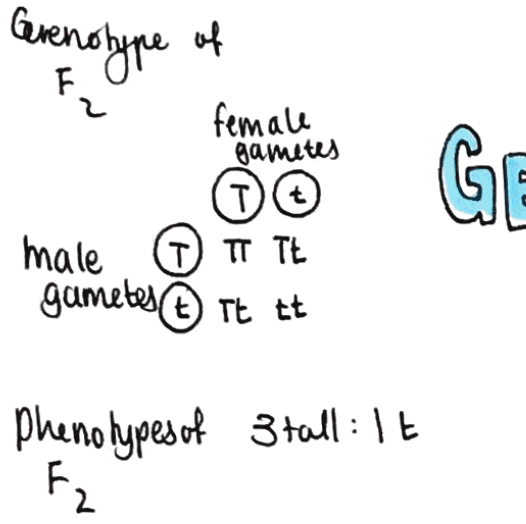
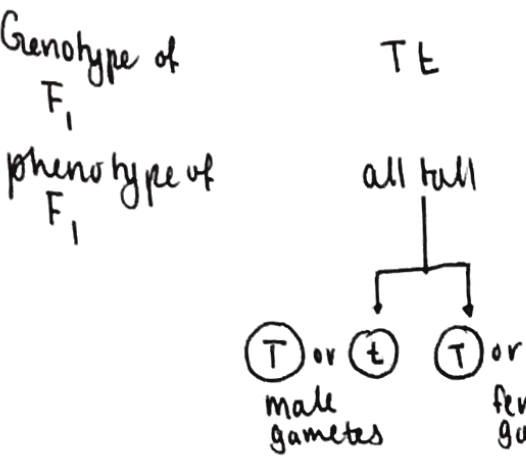
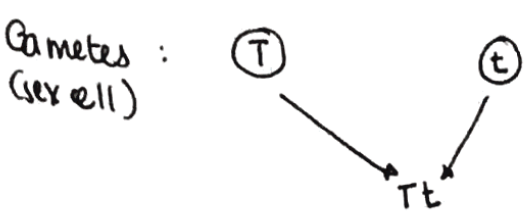


Eg. Tall + Dwarf plants
 phenotype: tall
 Genotype: TT



dwarf tt each has two copies of the same allele so it is homozygous
 sex cells formed by meiosis so have one allele
 it is heterozygous

GENES

CONT III

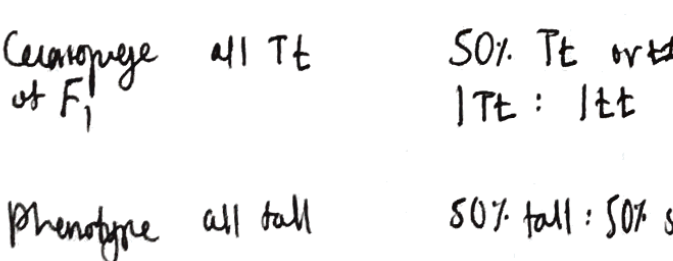
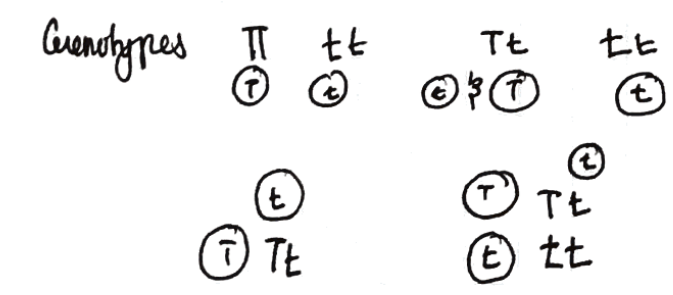
Tall is dominant so it powers/works/expressed
 dwarf is recessive so if there is tall then ~~there~~ it is not expressed and if it is another recessive, it's expressed.

TEST CROSS (breeding experiment)
 Unknown genotype is tested of organism showing dominant feature.

Plant bred with must have a known genotype - therefore it ~~must~~ must be recessive

Breed the unknown plant (either Tt or TT) with (tt) eg. dwarf plant b/c recessive

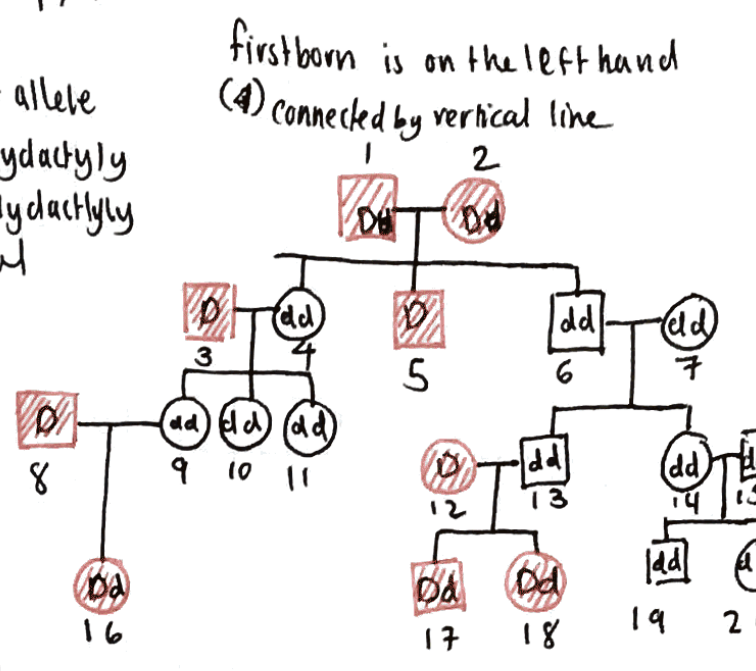
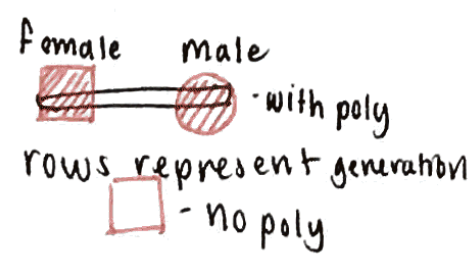
Can predict outcome with PUNNET Square



if homozygous - all will be tall
 if heterozygous - 50% tall or short.

Pedigree diagram
 eg. Polydactyly - extra digits on hands & feet

is dominant allele
 DD - has polydactyly
 Dd - has polydactyly
 dd - normal



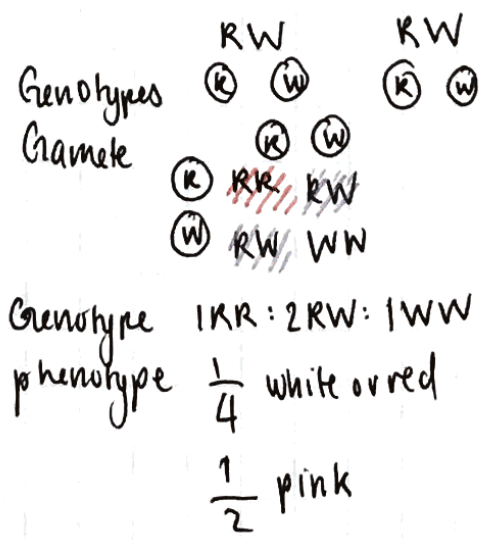
- although 1, 2 have poly 4, 6 don't so it must be heterozygous for 1, 2
- We can work the rest from here
- S could be DD or Dd (higher chance of Dd)
- The outsiders from the family also could be Dd, DD, not nuff' info.

CODOMINANCE

if two alleles are expressed together - are codominant.
 (they are represented by different letters to show co-dominance)



if red + white breed ~~and~~, all are pink flowers
 when there's a third phenotype out of the mix = codominance at play



SEX DETERMINATION

determined by the presence of the Y chromosome.

