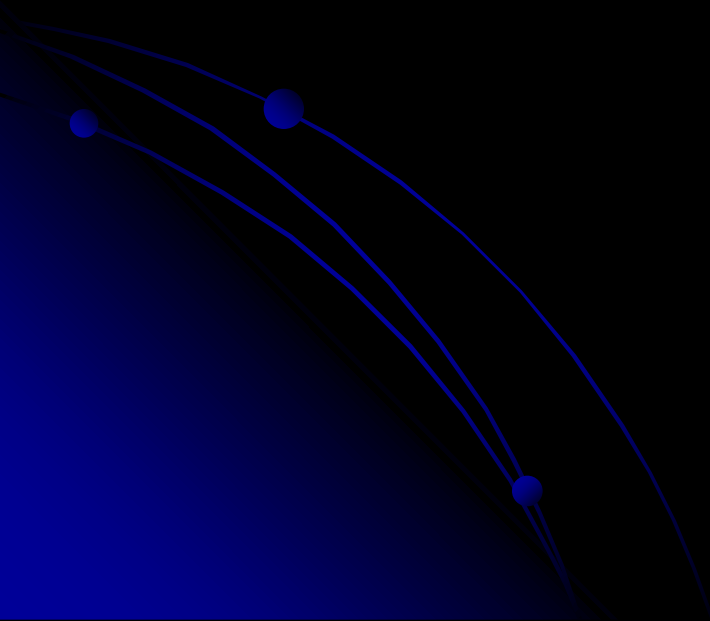


Genetic Word Problems



Genes

* Dominant

* Recessive

Tall Plant = Dominant Trait = (T)

Short Plant = Recessive Trait = (t)

Homozygous

Heterozygous

TT

tt

Tt

Genotypes

Tall

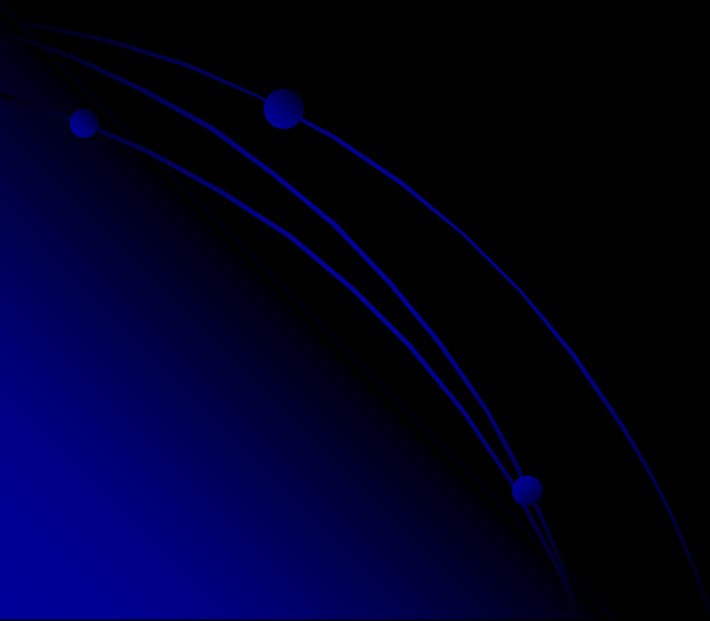
Short

Tall

Phenotypes

Homozygous Dominant x Homozygous Recessive

- In pea plants tall plants are dominant over short plants. If a homozygous dominant plant is crossed with a homozygous recessive plant, what would be the ratios/percents of genotypes & phenotypes?



Homozygous Dominant x Homozygous Recessive

- In pea plants tall plants are dominant over short plants. If a homozygous dominant plant is crossed with a homozygous recessive plant, what would be the ratios/percents of genotypes & phenotypes?

Parents

**Homozygous
Dominant =**

TT

**Homozygous
Recessive =**

tt

	T	T
t	Tt	Tt
t	Tt	Tt

Genotype

Ratios/Percents

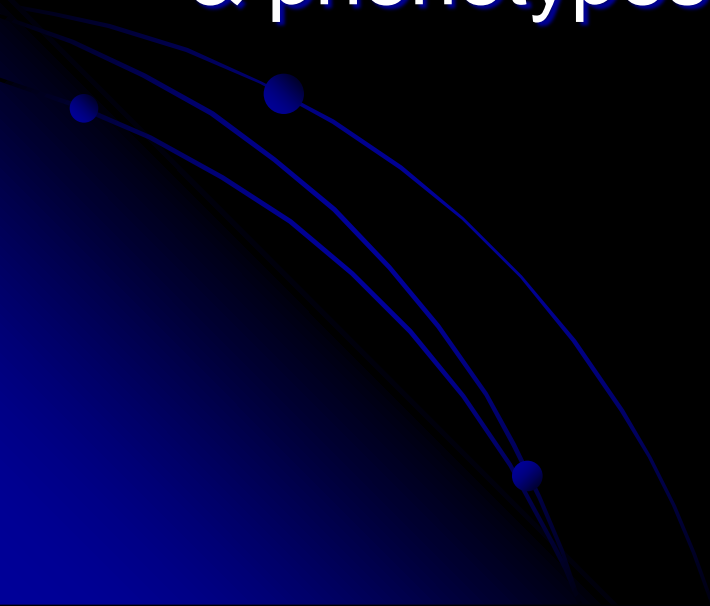
Tt = 4:4 = 100%

Phenotypes

Ratios/Percents

Tall = 4:4 = 100%

Homozygous Recessive x Short Plant

- In pea plants tall plants are dominant over short plants. If a homozygous recessive plant is crossed with a short plant, what would be the ratios/percents of genotypes & phenotypes?
- 

Homozygous Recessive x Short Plant

- In pea plants tall plants are dominant over short plants. If a homozygous recessive plant is crossed with a short plant, what would be the ratios/percents of genotypes & phenotypes?

Parents

Homozygous Recessive =

tt

Short plant =

tt

	t	t
t	tt	tt
t	tt	tt

Genotype Ratios/Percents

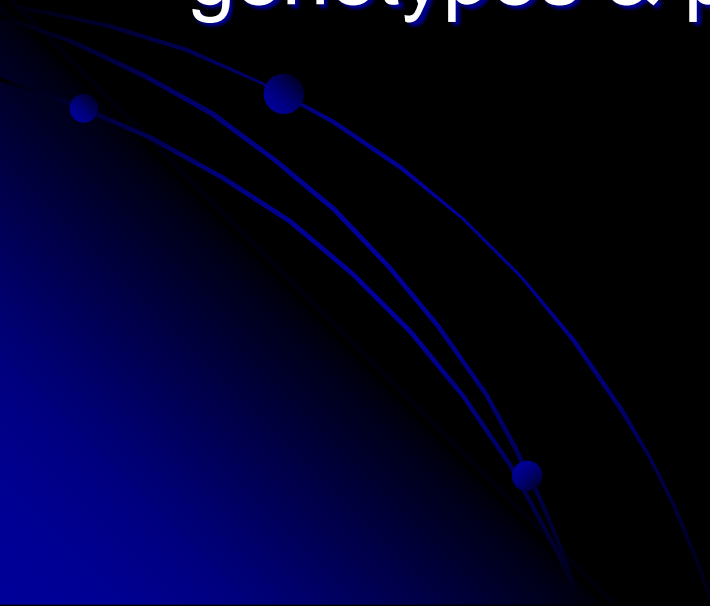
tt = 4:4 = 100%

Phenotypes Ratios/Percents

Short = 4:4 = 100%

Heterozygous x Heterozygous

- In pea plants tall plants are dominant over short plants. If a heterozygous plant is crossed with another heterozygous plant, what would be the ratios/percents of genotypes & phenotypes?



Heterozygous x Heterozygous

- In pea plants tall plants are dominant over short plants. If a heterozygous plant is crossed with another heterozygous plant, what would be the ratios/percents of genotypes & phenotypes?

Parents

Heterozygous
= Tt

Heterozygous
= Tt

	T	t
T	TT	Tt
t	Tt	tt

Genotype
Ratios/Percents

TT = 1:4 = 25%

Tt = 2:4 = 50%

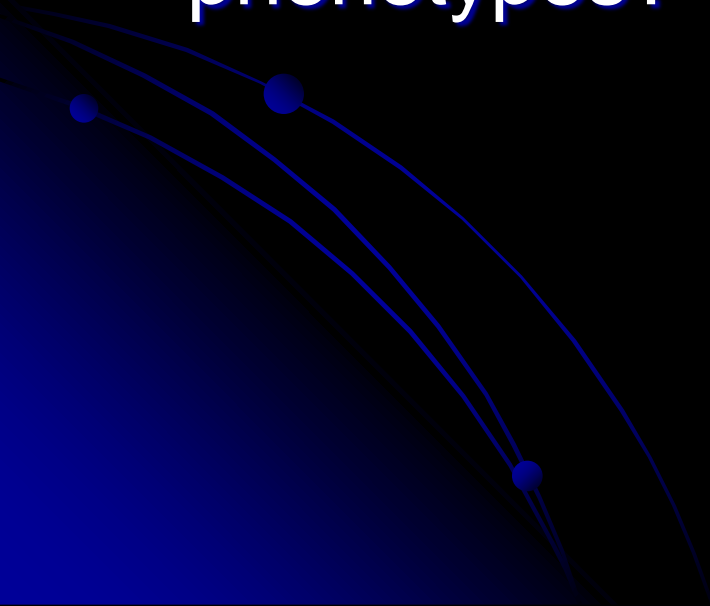
tt = 1:4 = 25%

Phenotypes
Ratios/Percents

Tall = 3:4 = 75%
Short = 1:4 = 25%

Heterozygous x Short Plant

- In pea plants tall plants are dominant over short plants. If a heterozygous plant is crossed with short plant, what would be the ratios/percents of genotypes & phenotypes?



Heterozygous x Short Plant

- In pea plants tall plants are dominant over short plants. If a heterozygous plant is crossed with short plant, what would be the ratios/percents of genotypes & phenotypes?

Parents

Heterozygous
= Tt

Short = tt

	T	t
t	Tt	tt
t	Tt	tt

Genotype
Ratios/Percents

Tt = 2:4 = 50 %

tt = 2:4 = 50%

Phenotypes
Ratios/Percents

Tall = 2:4 = 50%

Short = 2:4 = 50%

Heterozygous x Tall Plant

- In pea plants tall plants are dominant over short plants. If a heterozygous plant is crossed with a homozygous tall plant, what would be the ratios/percents of genotypes & phenotypes?

Heterozygous x Tall Plant

- In pea plants tall plants are dominant over short plants. If a heterozygous plant is crossed with a homozygous tall plant, what would be the ratios/percents of genotypes & phenotypes?

Parents

Heterozygous
= Tt

Homozygous
Tall = TT

	T	t
T	TT	Tt
T	TT	Tt

Genotype
Ratios/Percents

TT = 2:4 = 50%

Tt = 2:4 = 50%

Phenotypes
Ratios/Percents

Tall = 4:4 = 100%