



Dihybrid Crosses

Use the dihybrid cross below to answer the questions below:

| KEY | |
|-----------|------------|
| A= Green | B = Smooth |
| a= Yellow | b = Rough |

CROSS A HETEROZYGOUS GREEN, SMOOTH PLANT WITH ANOTHER HETEROZYGOUS GREEN, SMOOTH PLANT.

Parent Genotypes _____ x _____

Possible Combinations _____ x _____

| | AB | Ab | aB | ab |
|----|----|----|----|----|
| AB | | | | |
| Ab | | | | |
| aB | | | | |
| ab | | | | |

1. What is the genotype for the square that is colored in?
2. What is the phenotype for the square that is colored in?
3. What would be the phenotype for an offspring that is AaBb?
4. What fraction of the offspring will be rough and green? Remember to express this as ?/16.
5. What fraction of the offspring will be AAbb?
6. What fraction of the offspring will be homozygous dominant for both traits?
7. What fraction of the offspring will be heterozygous for both traits?

KEY

A = Green

B = Smooth

a = Yellow

b = Rough

CROSS A HETEROZYGOUS GREEN, SMOOTH PLANT WITH A PLANT THAT IS HETEROZYGOUS GREEN AND ROUGH.

Parent Genotypes _____ x _____

Possible Combinations _____ x _____

_____ green/smooth: _____ green/rough: _____ yellow/smooth: _____ yellow/rough