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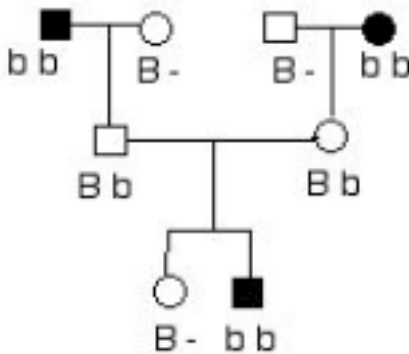
All questions worth 2 points. Write answers *only* in space provided.

1. In furbys, brown eyes (B) is dominant over blue eyes (b). A brown-eyed furby is bred to a blue-eyed furby, producing 23 brown-eyed and 21 blue-eyed progeny.

(a) What was the genotype of the blue-eyed parent? bb

(b) What was the genotype of the brown-eyed parent? Bb

2. In the pedigree below:



(a) Fill in the genotypes. Assume a single autosomal gene with dominant allele *B* and recessive allele *b*.

(b) What is the probability that individual III 1 is homozygous recessive?

Answer: 0 (because we know it has the dominant phenotype)

(c) What is the probability that individual III 1 is homozygous dominant?

Answer: 1/3 (because we know it can't be *bb*, which leaves two possibilities, *BB* (1/3) and *Bb* (2/3)).