

SC.912.L.16.1 – Genetics – Example 9 Answer

A human baby boy inherits a recessive allele from his mother. In which circumstance would he most likely show the trait coded for by the recessive allele?

- A. The baby inherits the dominant allele from his father.**
- B. The allele is on an autosomal chromosome and the baby is a twin.**
- C. The allele is on the X chromosome.**
- D. The allele is on the Y chromosome.**

Answer

C. The allele is on the X chromosome.

Traits coded for on the X chromosome will always be expressed in males because there is no counterpart allele to mask the expression. Boys have XY genotype and girls have XX genotype.