

Video Notes:

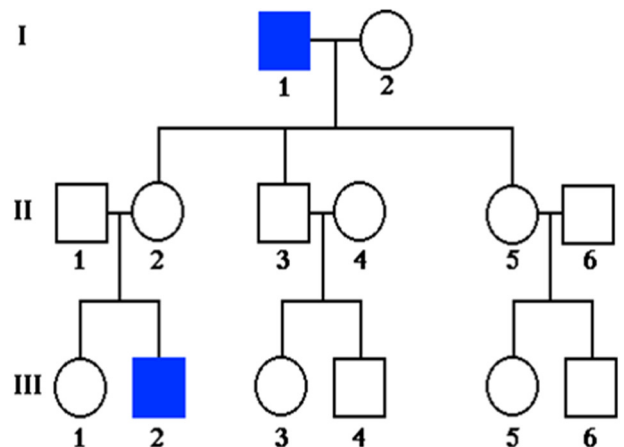
Sex-Linked Problems

Summary of key symbols...  
 Y=\_\_\_\_\_      X=\_\_\_\_\_      X<sup>c/m/etc</sup> \_\_\_\_\_

1. Muscular dystrophy is a **sex-linked** recessive trait. Muscular dystrophy is represented by the X<sup>m</sup>. A female carrier for muscular dystrophy marries a man who does not have muscular dystrophy. Perform a Punnett square and answer the questions below.
  - a. What is the chance they will have a daughter will have muscular dystrophy?
  - b. What is the chance they will have a son with the disorder?

2. Hemophilia is a **sex-linked** recessive trait. A man with hemophilia plans to have a family with a woman who does not have hemophilia and is not a carrier for the trait. Could any of their kids have hemophilia? Could any kids be carriers?

3. Colorblindness is a **sex-linked** recessive trait. Why are the odds of passing on colorblindness to the next generation way higher if the mother has the trait? Explain thoroughly or use a Punnett Square as concrete evidence.



4. The pedigree to the right is for a sex-linked recessive trait. Choose appropriate symbols and show the genotypes of the people in the chart.