

Sex-Linked Traits*Use with textbook page 36.*

1. Define *sex-linked trait*.

2. Consider the X-linked trait hemophilia. What is the genotype for each of the following individuals?

- a) a man with hemophilia _____
- b) a woman with hemophilia _____
- c) a man with normal blood clotting ability _____
- d) a woman who is a carrier for hemophilia _____
- e) a woman with normal blood clotting ability and who is not a carrier _____

3. A woman who is a carrier for hemophilia marries a man with normal blood clotting ability. What are the possible genotypes and phenotypes of their children? It may be useful to complete a Punnett square.

- a) Genotypes:

_____ % $X^H X^H$

_____ % $X^H X^h$

_____ % $X^h X^h$

_____ % $X^H Y$

_____ % $X^h Y$

- b) Phenotypes:

_____ % hemophiliac

_____ % normal blood clotting ability