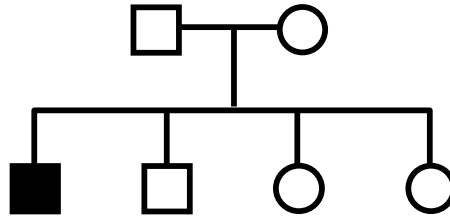


**GENETICS PRACTICE 4: PEDIGREES**

**PEDIGREE #1**



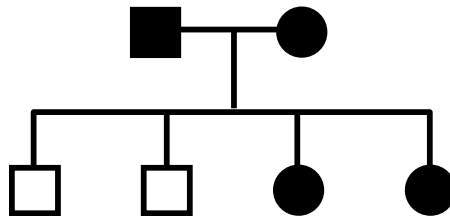
Could this trait be inherited as a simple...

- |                         |                                      |                                     |
|-------------------------|--------------------------------------|-------------------------------------|
| a. autosomal recessive? | <input checked="" type="radio"/> YES | <input type="radio"/> NO            |
| b. autosomal dominant?  | <input type="radio"/> YES            | <input checked="" type="radio"/> NO |
| c. X-linked recessive?  | <input checked="" type="radio"/> YES | <input type="radio"/> NO            |
| d. X-linked dominant?   | <input type="radio"/> YES            | <input checked="" type="radio"/> NO |
| e. Y-linked trait?      | <input type="radio"/> YES            | <input checked="" type="radio"/> NO |

If "YES", then suggested genotypes of father      mother

<u>Aa</u>	x	<u>Aa</u>
_____	x	_____
<u>X<sup>A</sup>Y</u>	x	<u>X<sup>A</sup>X<sup>a</sup></u>
_____	x	_____
_____	x	_____

**PEDIGREE #2**



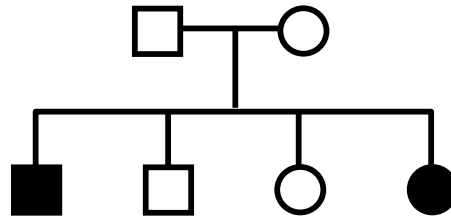
Could this trait be inherited as a simple...

- |                         |                                      |                                     |
|-------------------------|--------------------------------------|-------------------------------------|
| a. autosomal recessive? | <input type="radio"/> YES            | <input checked="" type="radio"/> NO |
| b. autosomal dominant?  | <input checked="" type="radio"/> YES | <input type="radio"/> NO            |
| c. X-linked recessive?  | <input type="radio"/> YES            | <input checked="" type="radio"/> NO |
| d. X-linked dominant?   | <input checked="" type="radio"/> YES | <input type="radio"/> NO            |
| e. Y-linked trait?      | <input type="radio"/> YES            | <input checked="" type="radio"/> NO |

If "YES", then suggested genotypes of father      mother

_____	x	_____
<u>Aa</u>	x	<u>Aa</u>
_____	x	_____
<u>X<sup>A</sup>Y</u>	x	<u>X<sup>A</sup>X<sup>a</sup></u>
_____	x	_____

**PEDIGREE #3**



Could this trait be inherited as a simple...

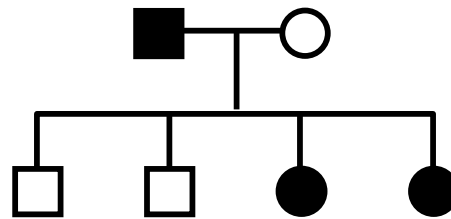
- a. autosomal recessive?
- b. autosomal dominant?
- c. X-linked recessive?
- d. X-linked dominant?
- e. Y-linked trait?

<input checked="" type="radio"/>	YES	NO
<input type="radio"/>	YES	<input checked="" type="radio"/>
<input type="radio"/>	YES	<input checked="" type="radio"/>
<input type="radio"/>	YES	<input checked="" type="radio"/>
<input type="radio"/>	YES	<input checked="" type="radio"/>

If "YES", then suggested genotypes of father      mother

<u>Aa</u>	x	<u>Aa</u>
_____	x	_____
_____	x	_____
_____	x	_____
_____	x	_____

**PEDIGREE #4**



Could this trait be inherited as a simple...

- a. autosomal recessive?
- b. autosomal dominant?
- c. X-linked recessive?
- d. X-linked dominant?
- e. Y-linked trait?

<input checked="" type="radio"/>	YES	NO
<input checked="" type="radio"/>	YES	NO
<input checked="" type="radio"/>	YES	NO
<input checked="" type="radio"/>	YES	NO
<input type="radio"/>	YES	<input checked="" type="radio"/>

If "YES", then suggested genotypes of father      mother

<u>aa</u>	x	<u>Aa</u>
<u>Aa</u>	x	<u>aa</u>
<u>X<sup>a</sup>Y</u>	x	<u>X<sup>A</sup>X<sup>a</sup></u>
<u>X<sup>A</sup>Y</u>	x	<u>X<sup>a</sup>X<sup>a</sup></u>
_____	x	_____