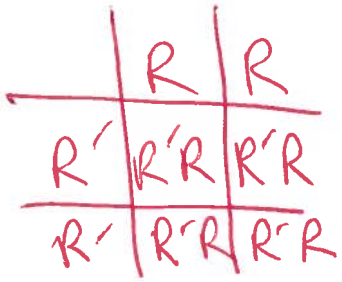
Genetics Practice Problems

Show your work

1. When crossing a red and white flower, what is the chance of producing a pink flower?



a. 0%

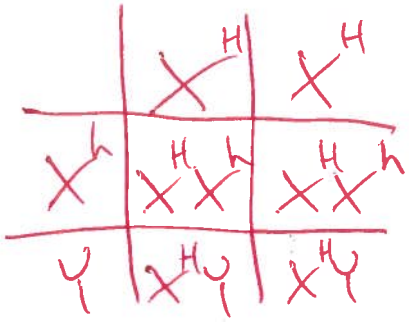
b. 25%

c. 50%

d. 75%

e. 100%

2. When crossing a homozygous normal female and a hemophilic male, what is the chance of producing a normal female?



a. 0%

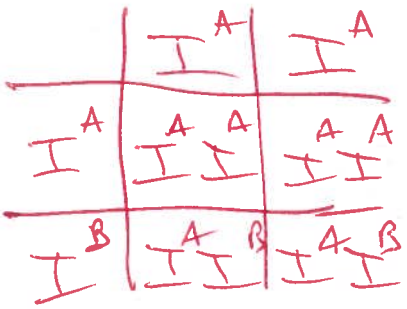
b. 25%

c. 50%

d. 75%

e. 100%

3. When crossing a woman with homozygous Type A Blood with a man with Type AB Blood, what is the chance of producing a child with Type B Blood?



a. 0%

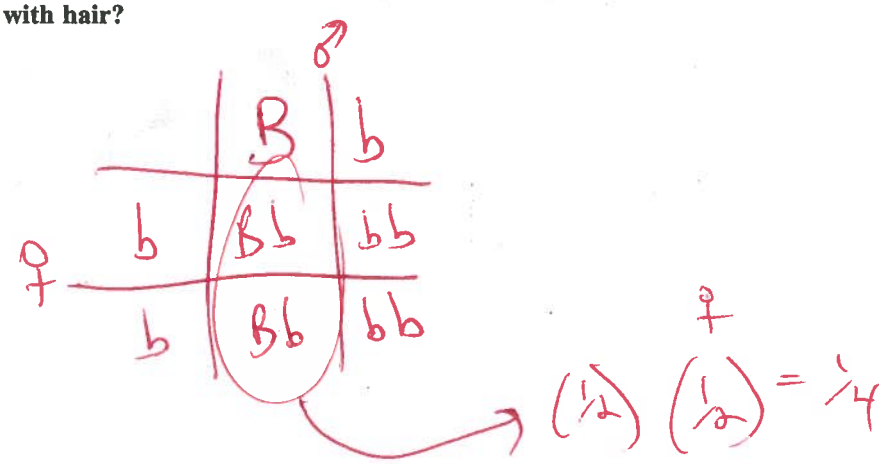
b. 25%

c. 50%

d. 75%

e. 100%

4. When crossing a heterozygous bald male with a bald female, what is the chance of producing a female with hair?



a. 0%

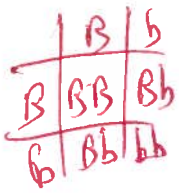
b. 25%

c. 50%

d. 75%

e. 100%

5. What is the chance that a person with the skin color genes <u>aaBbCCDd</u> and a person with genes <u>AaBbCcDd</u> will have a child with the skin color genes <u>aaBBCcdd</u>?



aa BB Cc dd

$(\frac{1}{2})(\frac{1}{4})(\frac{1}{2})(\frac{1}{4})$

a. 0%

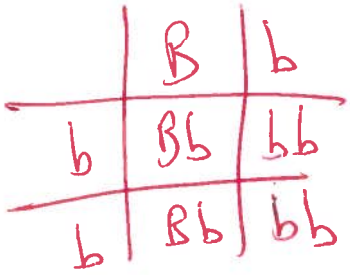
b. 1/4

c. 1/8

d. 1/32

e. 1/64

6. When crossing a person with brachydactyly with a normal person, what is the chance that the child spontaneously abort due to a lethal gene combination?



No BB

a. 0%

b. 33%

c. 50%

d. 66%

e. 100%