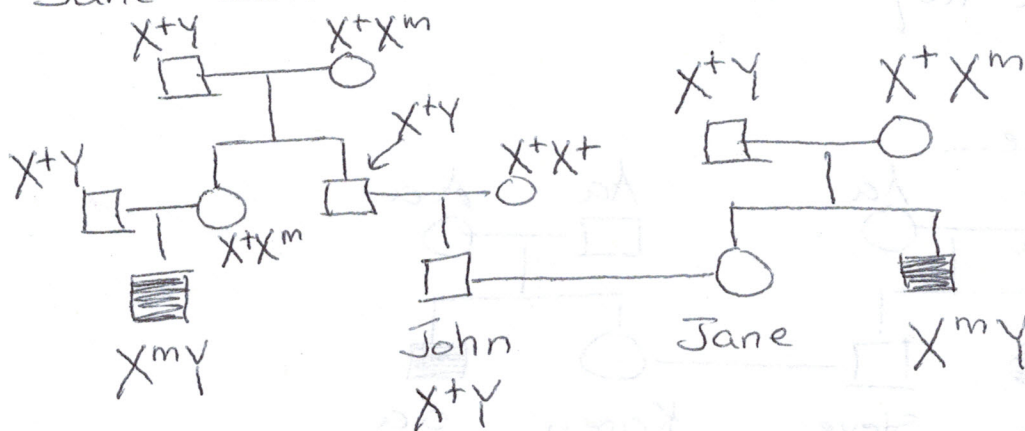


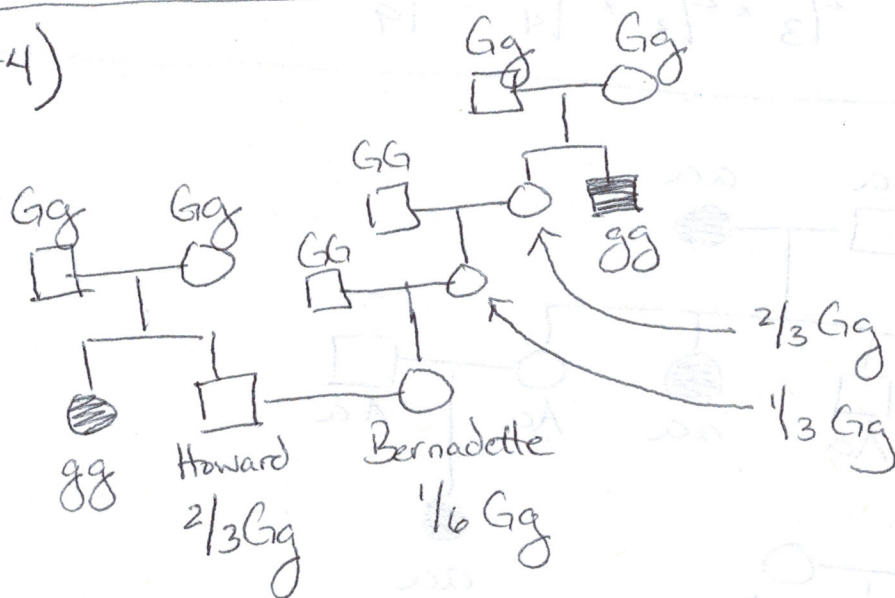
#3) Jane + John...



- John cannot have the mutant DMD allele, therefore he cannot pass it on : 0%
- There is a 50% chance that Jane is heterozygous.
- If Jane is heterozygous, then 50% of her sons will be affected:

$$\left[\frac{1}{2} \text{ Jane is } X^+X^m \right] \times \left[\frac{1}{2} \text{ chance of son} \right] \times \left[\frac{1}{2} \text{ sons affected} \right] = \frac{1}{8}$$

#4)



b) $\frac{2}{3}$

c) $\frac{1}{6}$

d) $\frac{2}{3} \times \frac{1}{6} \times \frac{1}{4} = \frac{1}{36}$