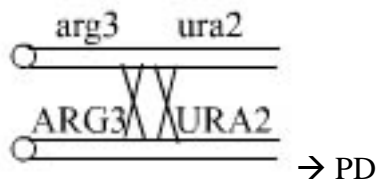
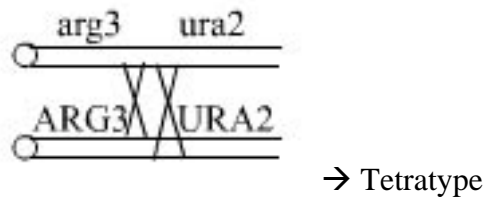




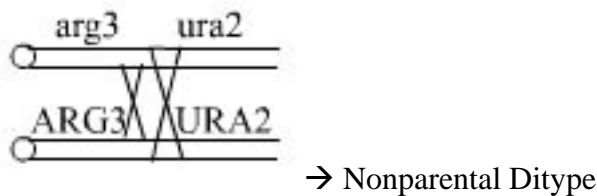
1. Double crossover (2 strand)



2. Double crossover (3 strand)



3. Double crossover (4 strand)



B. If 2 genes are linked, then PD >> NPD

C. Double crossovers between linked genes will give PD : T : NPD
1 : 2 : 1

1. NPD = 1/4 of doubles

D. Frequency of Recombinant Progeny (If PD >> NPD, they are linked)

1. RF = (1/2T + NPD) / Total

2. Take 1/2 of T because half are parentals and half are recombinants

E. If genes are unlinked, you can't measure distance!

F. To correct for double crossovers, providing a better estimate

1. RF = (1/2[T-2NPD] + 4NPD) / Total

G. Refer to Figures 5.16, 5.22, and 5.23 for more on Neurospora and its segregation patterns