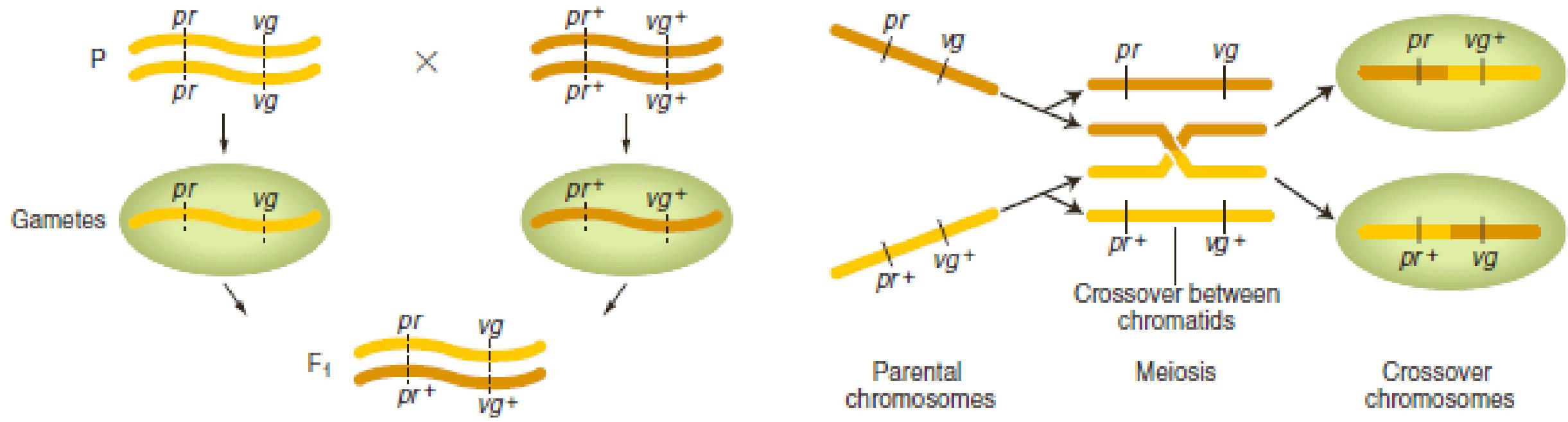
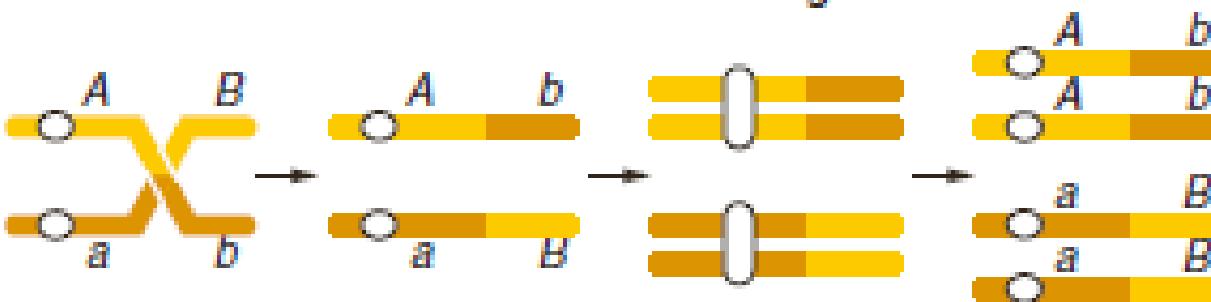


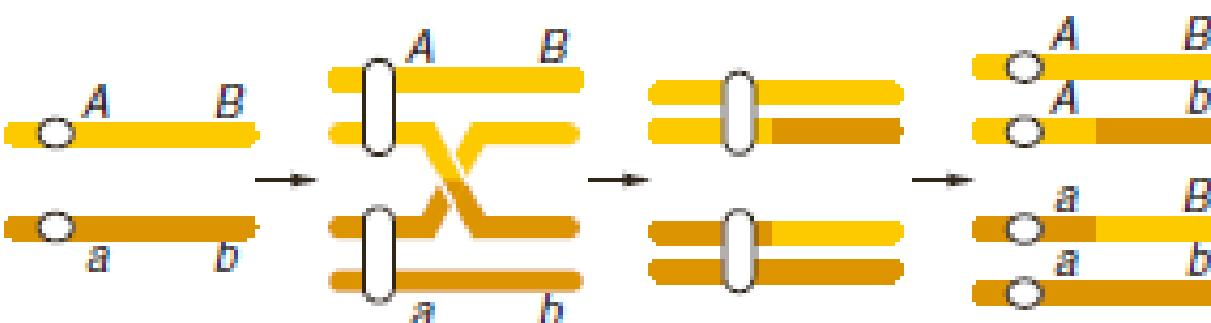
4. Rekombinasyon ile Ökaryot Kromozomları Haritalama



Two-chromosome stage

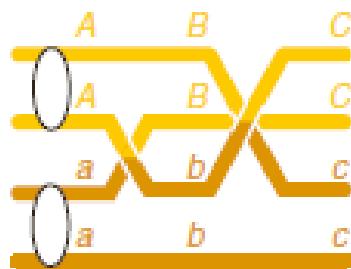


Four-chromatid stage

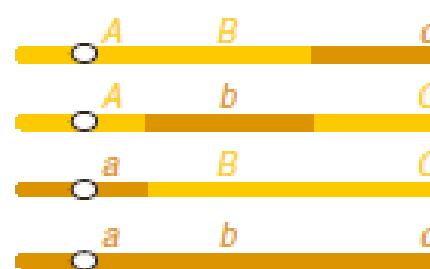


(a)

Position of crossovers

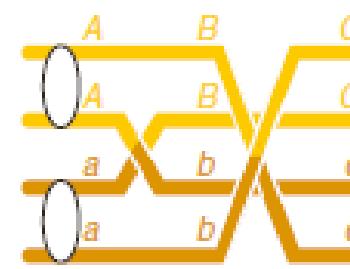


Tetrad genotypes



(b)

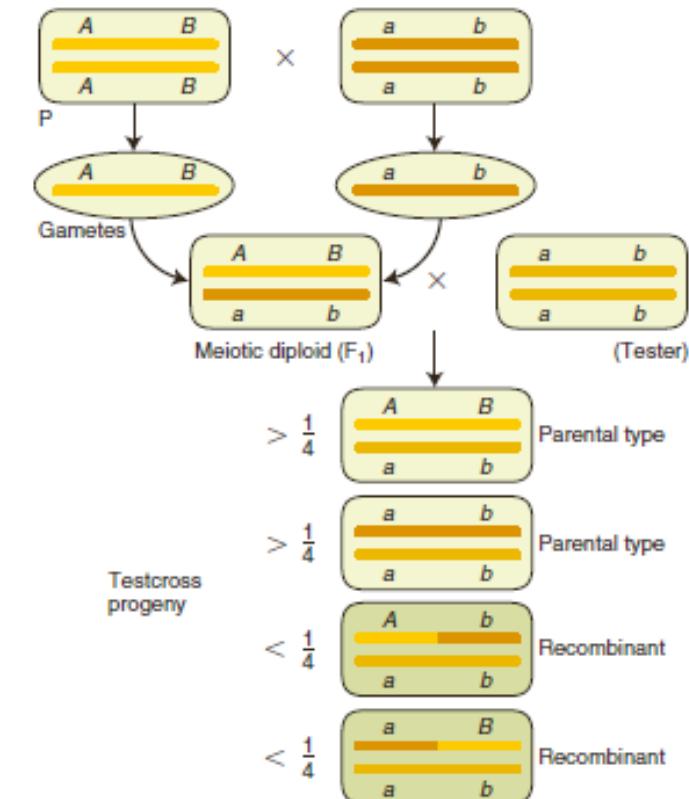
Position of crossovers

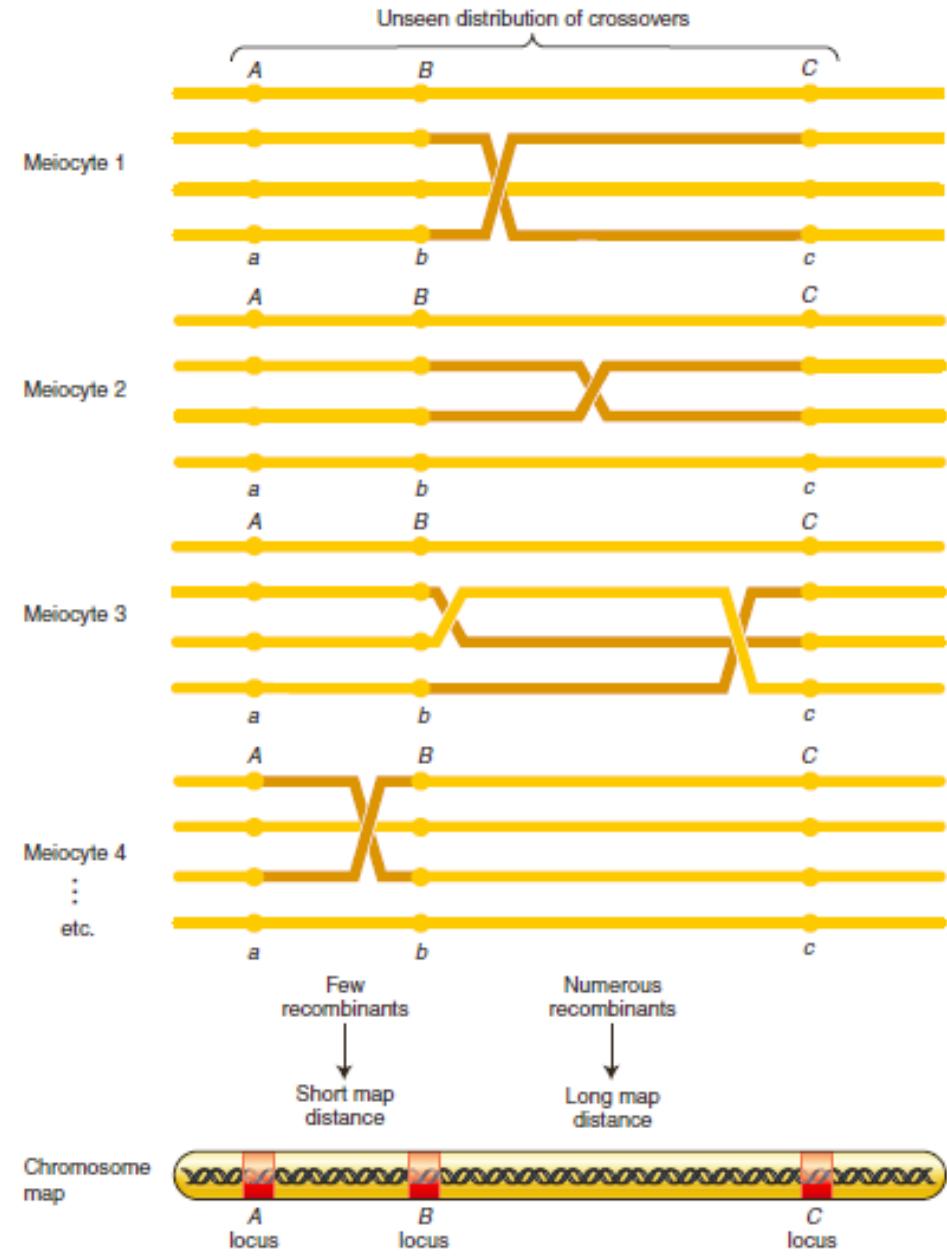
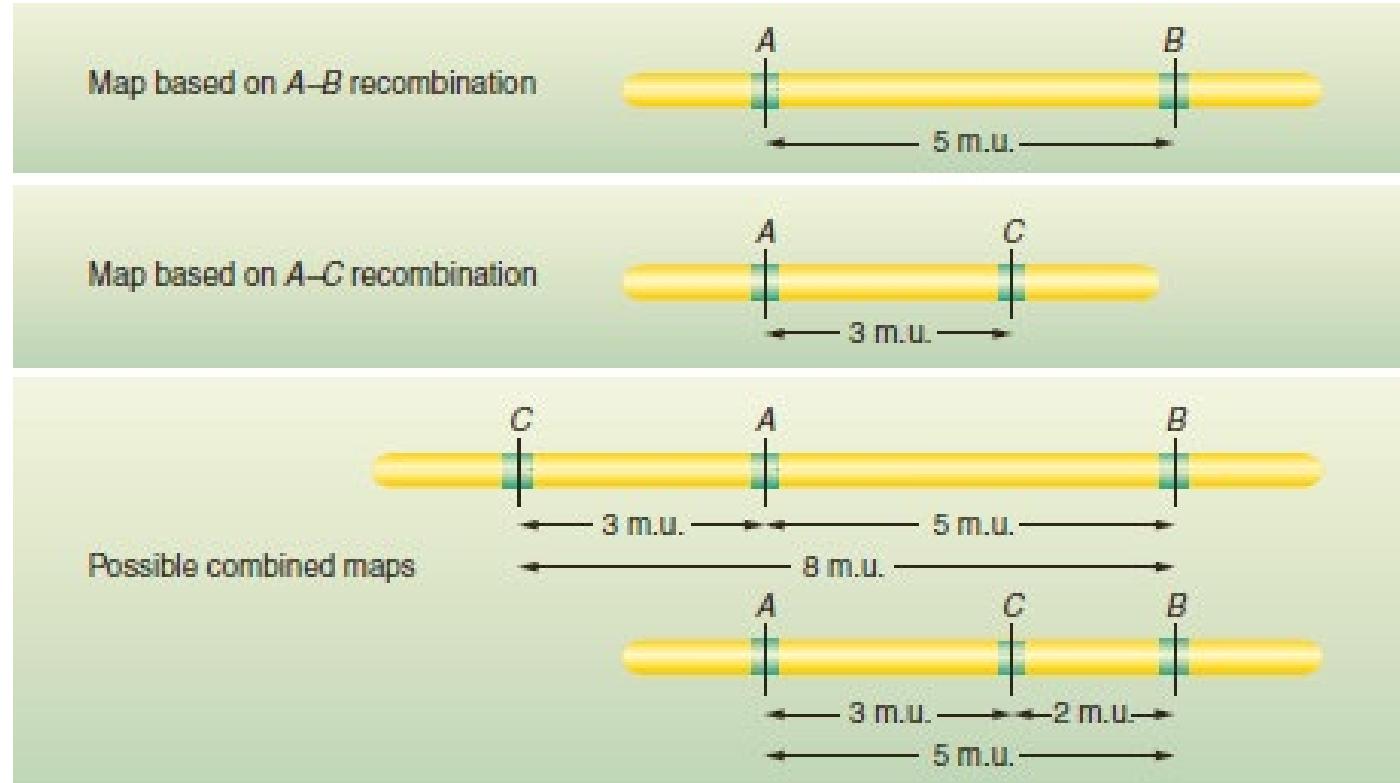


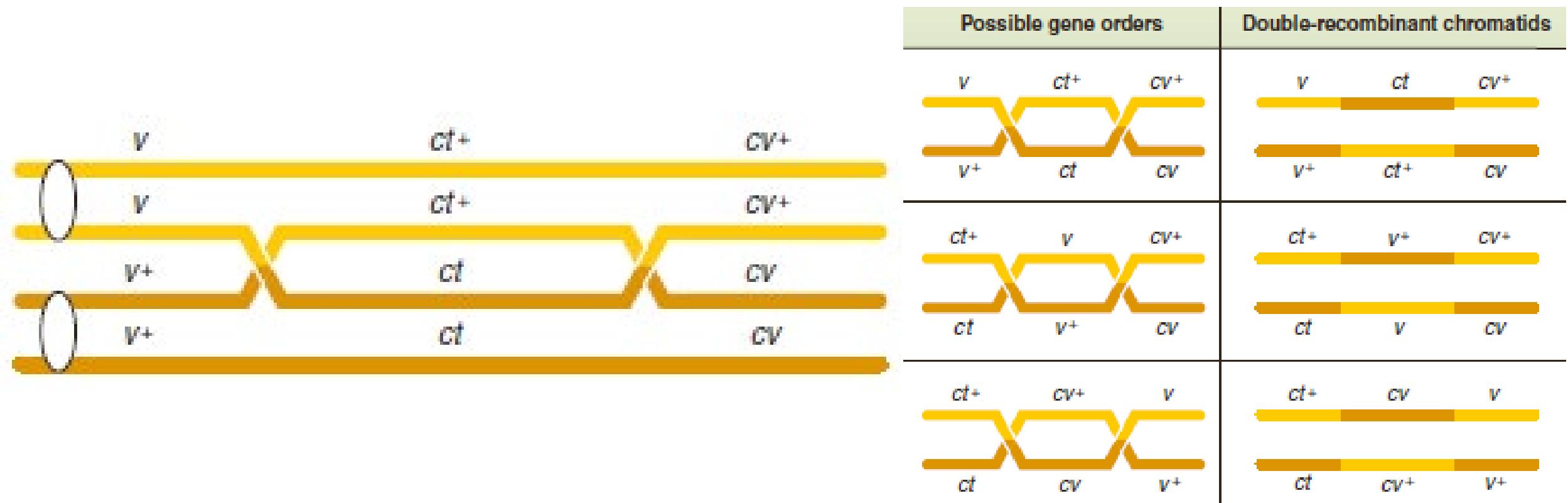
Tetrad genotypes



	Meiotic chromosomes	Meiotic products	
Meioses with no crossover between the genes			Parental Parental Parental Parental
Meioses with a crossover between the genes			Parental Recombinant Recombinant Parental







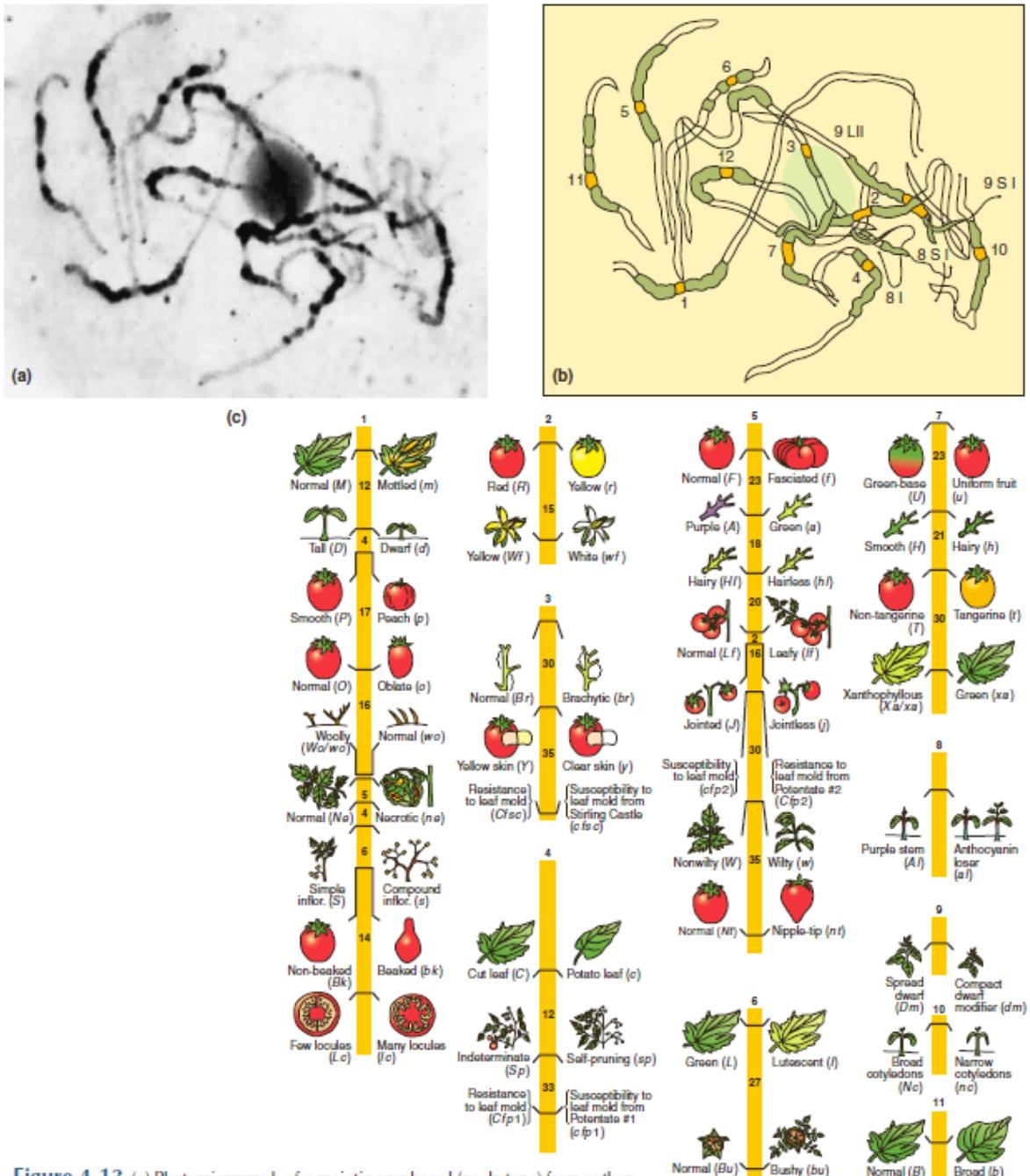
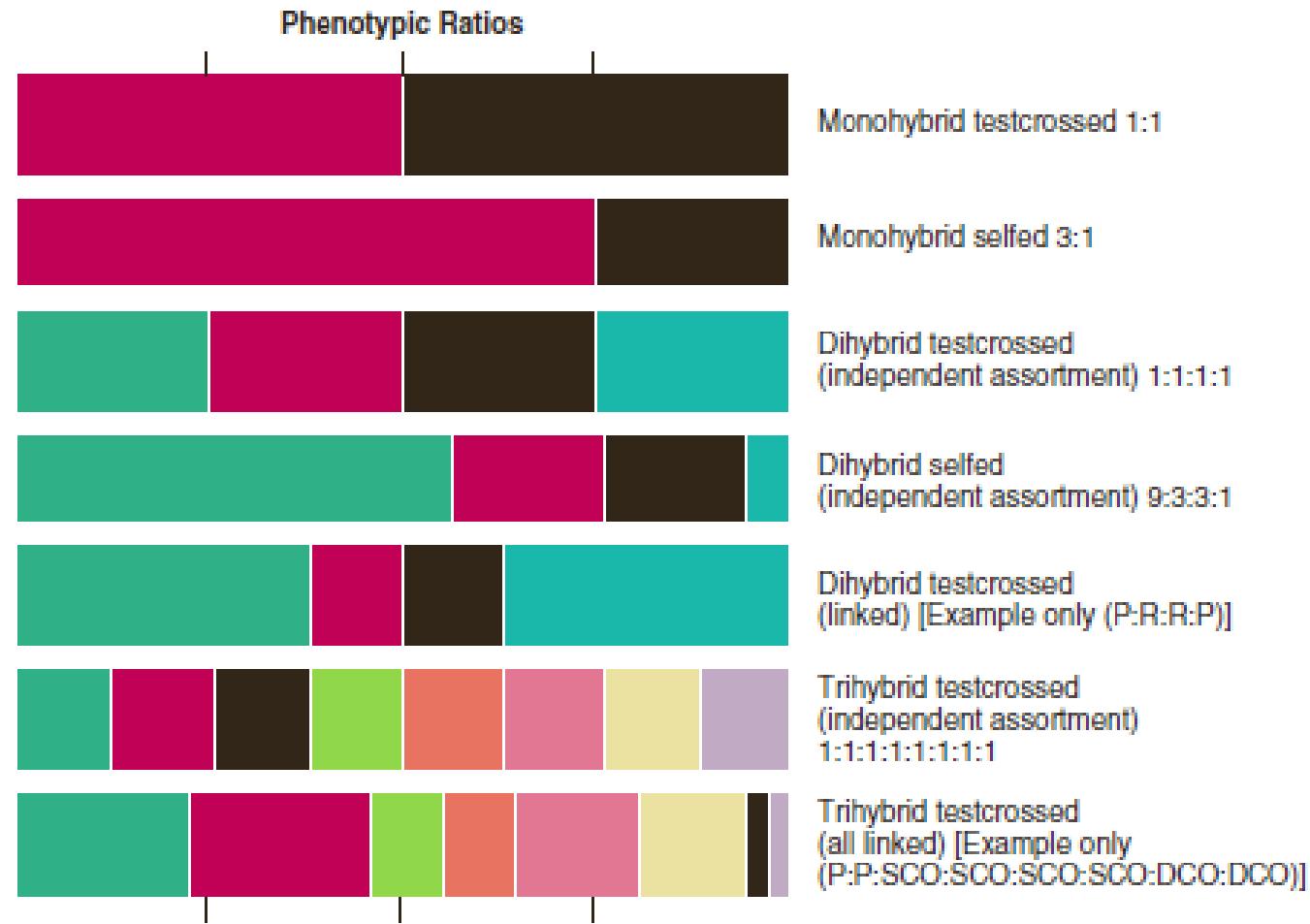


Figure 4.12 (a) Determinants of a massive number of publications from authors

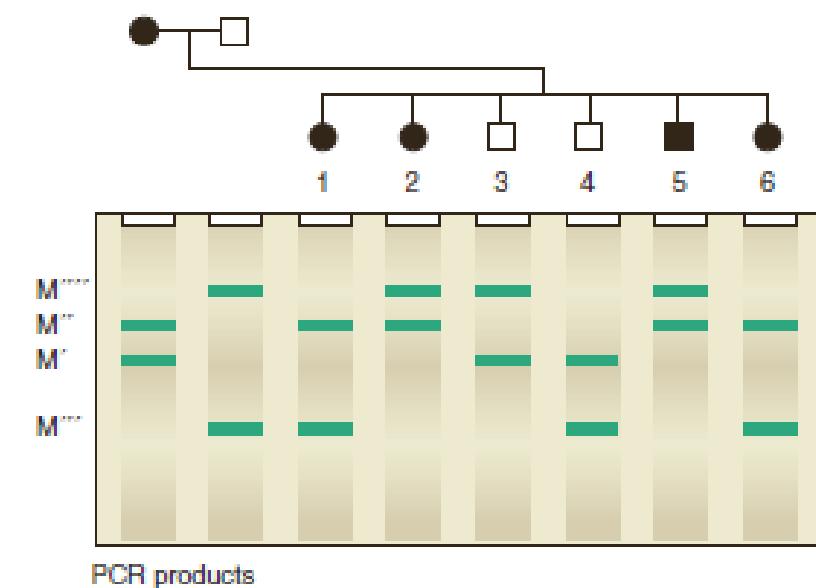
Reference: Griffiths, A. J., Wessler, S. R., Lewontin, R. C., Gelbart, W. M., Suzuki, D. T., & Miller, J. H. (2005). *An introduction to genetic analysis*. Macmillan.

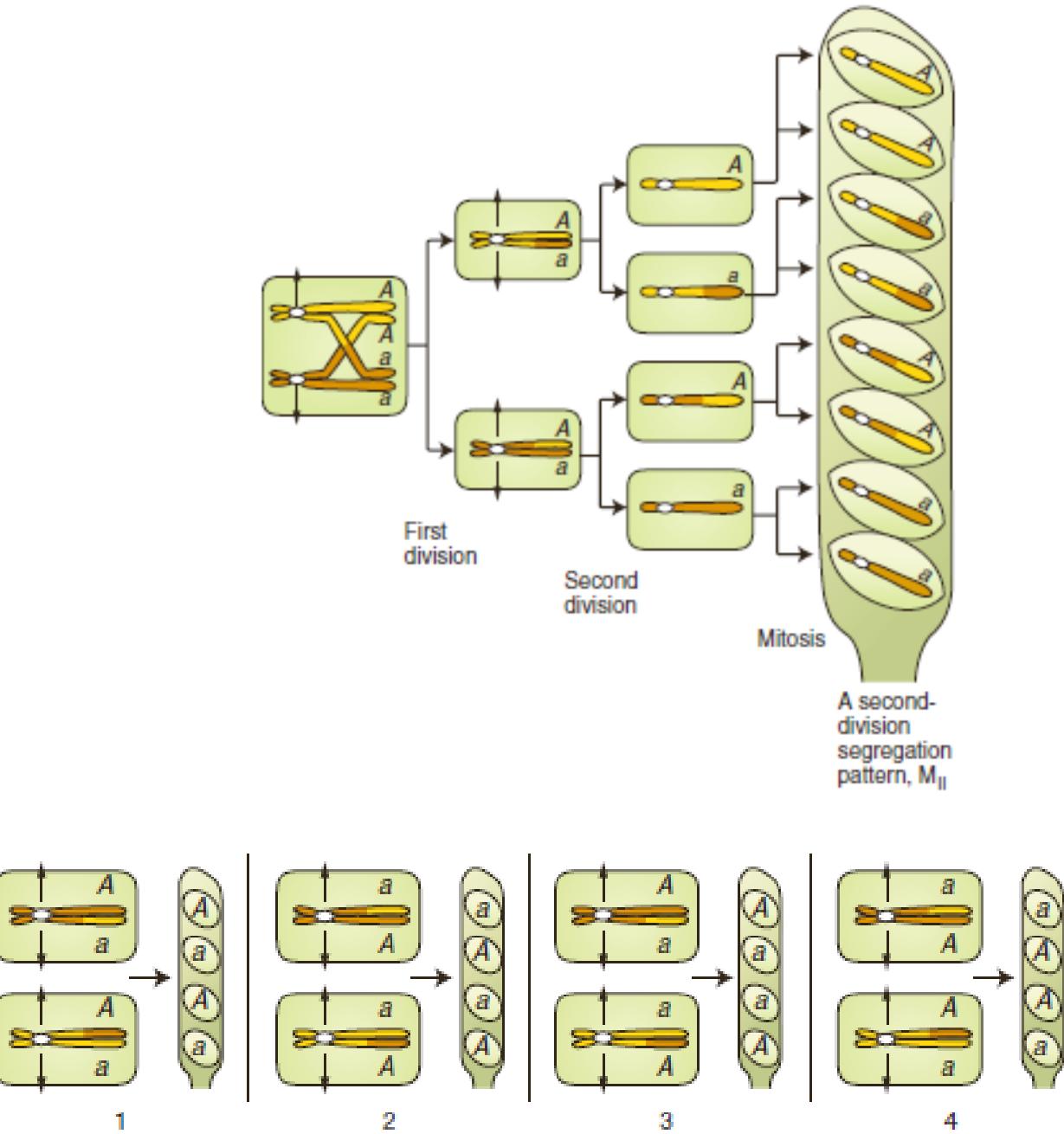
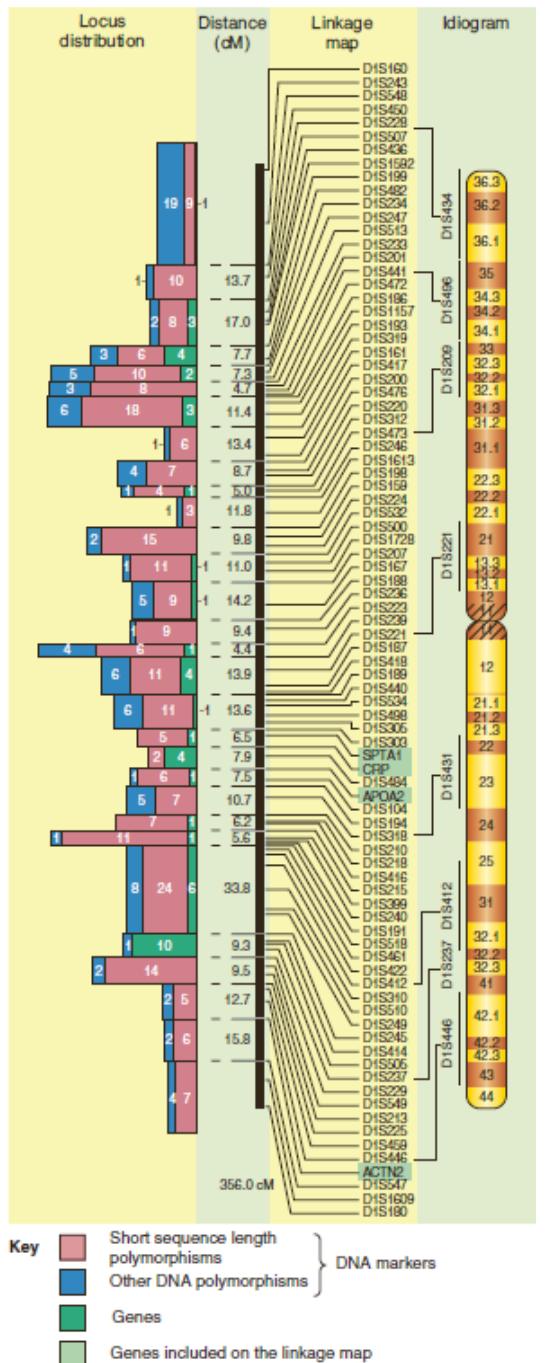


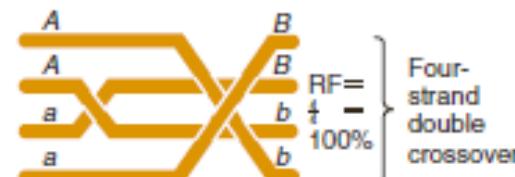
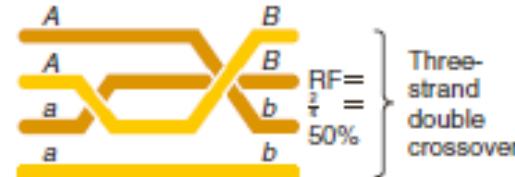
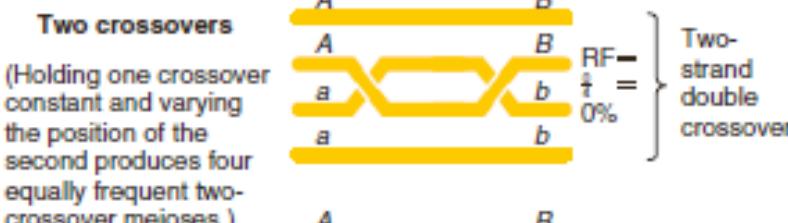
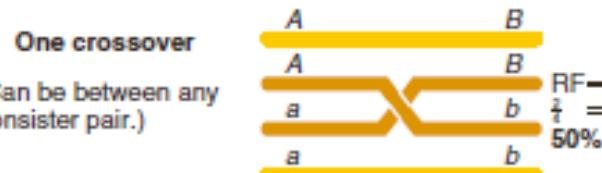
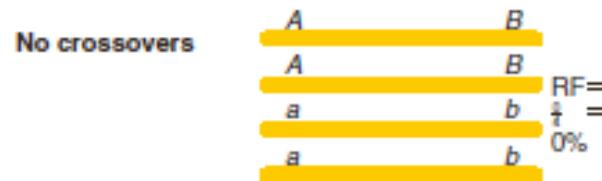
(a) Parental genotypes



(b) Banding patterns of parents and children

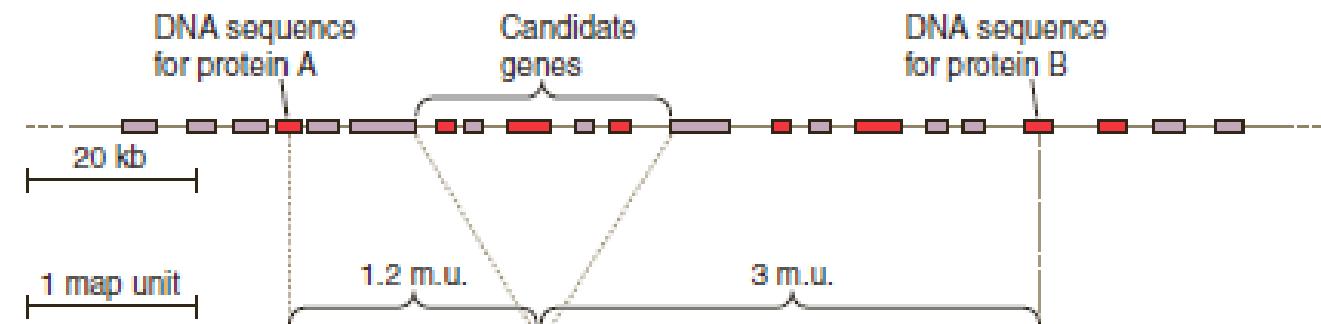






Average two-crossover $RF = \frac{1}{4} = 50\%$

Physical map



Recombination map

DNA sequence for protein A Candidate genes DNA sequence for protein B

20 kb 1 map unit 1.2 m.u. 3 m.u.

Locus of gene with mutant phenotype, known to lack protein A Locus of gene with mutant phenotype, unknown cell function Locus of gene with mutant phenotype, known to lack protein B

Key

■ Function suspected from other organisms ■ Function unknown

