1. In Drosophila, bar shaped eyes (B), scalloped wings (S), Crossveinless wings (W), and Eye Color (C) are located on the X chromosome. The recombination frequency of each gene is indicated on the table. Construct a chromosome map.

Genes Frequency of Crossover

W-B 2.5%

W-C 3.0%

B-C 5.5%

B-S 5.5%

W-S 8.0%

C-S 11.0%

2. The following chart shows the crossover frequencies for genes on an autosome of the Armor Plated Peruvian cockroach. Construct a chromosome map.

Genes Frequency of Crossover

P-Q 5%

P-R 8%

P-S 12%

Q-R 13%

Q-S 17%

3. The following chart shows the crossover frequencies for genes on the X-chromosome of the Snow-stomping Yeti. Construct a map given the following data.

Gene Frequency of Crossover

A-B 24%

A-C 8%

C-D 2%

A-F 16%

F-B 8%

D-F 6%