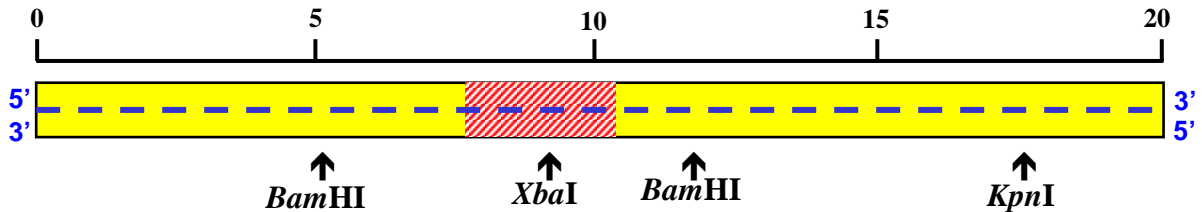


HOMEWORK #8 KEY

1. Draw a restriction map of the 20 kb DNA fragment. In other words, make a drawing representing the virus genome which shows the relative positions (ie, order) of the restriction sites. Either include a scale (in kb) or indicate the approximately distances between restriction sites.



2. Indicate on the restriction map the region which corresponds to the nucleocapsid gene.

Cross-hatched area in red.

3. What factor(s) may compromise the accuracy of the map in regards to the distances between the restriction sites?

**Two restriction sites closer together than the resolution of the gel (eg., 100 bp).
Any other factors affecting the size determination of the fragments.**

4. Is the map you drew the only possible map for the data? Why or why not?

An equally valid map is in the opposite orientation in regards to the order of the restriction sites.