

This is a 15 point problem - 5 points for each flip-flop.

Complete the timing diagrams for each of the three flip-flops shown below.

For these problems the clock frequency is so low, and hence the clock period is so long, that the delay between the active clock edge and the new output of the flip-flop is negligible on the time-scale of these diagrams. The thick bar on the left of the timing diagram for X, Y and Z shows the starting state of the respective flip-flop.

