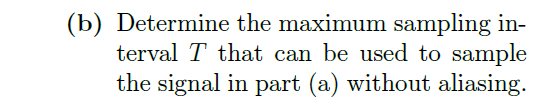


We can see that the apparent frequencies for f1 and f2 components are the same as their actual frequencies. But for f3 the apparent frequency is different than the actual frequency – because the sampling frequency is not meeting the Nyquist criteria of being twice the frequency of the largest frequency component of the signal.



The maximum sampling interval T will be the inverse of the minimum sampling frequency. This minimum should follow Nyquist’s criteria of being at least twice the frequency of the largest frequency component. So, this is 5000Hz