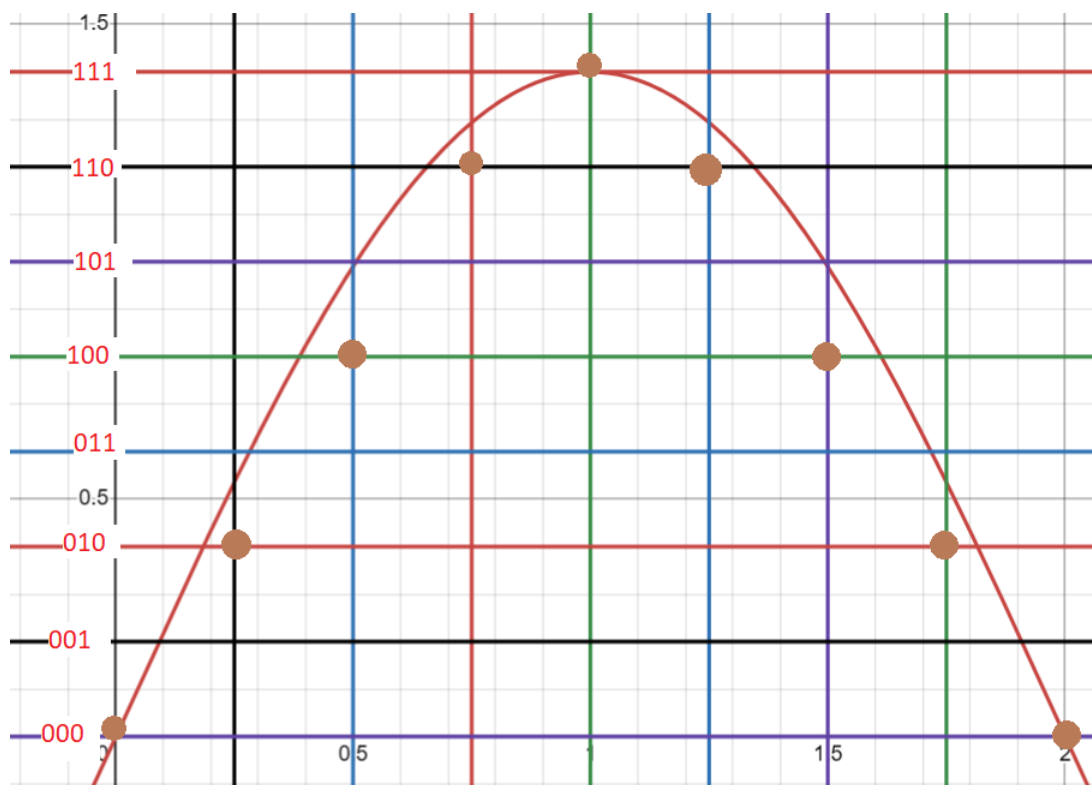
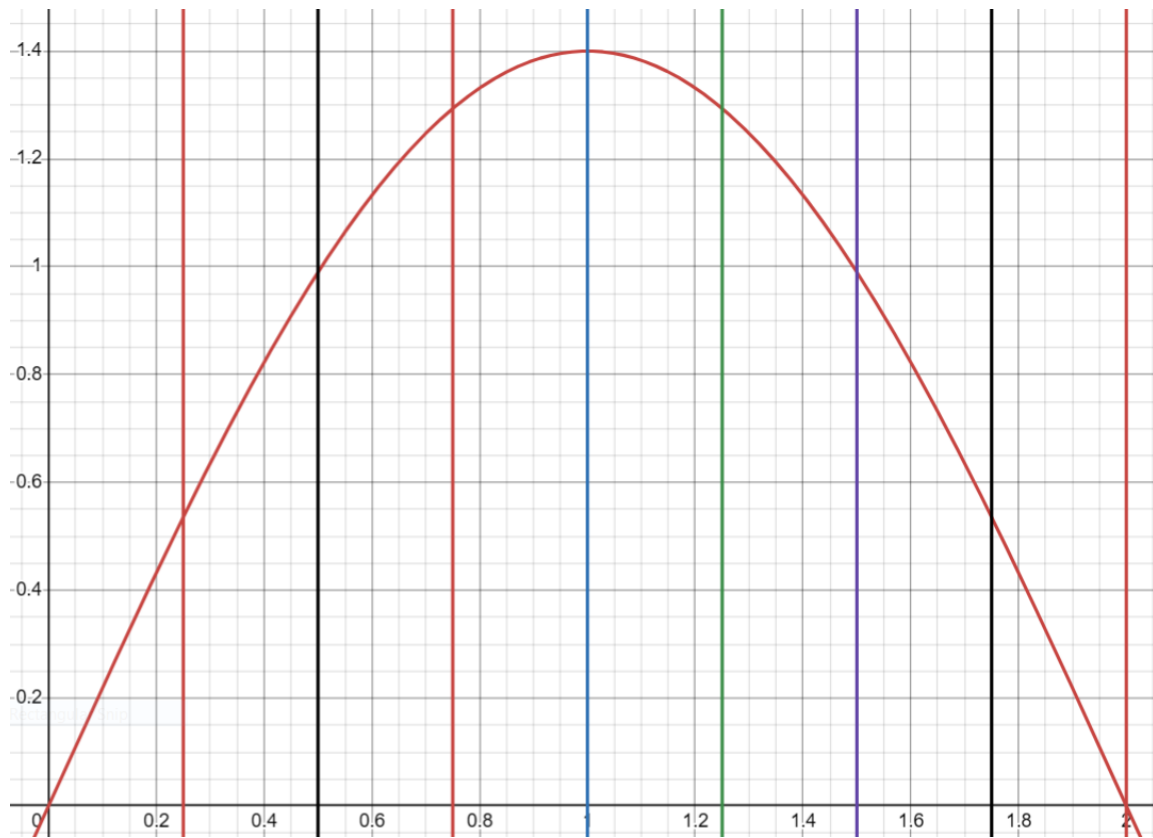
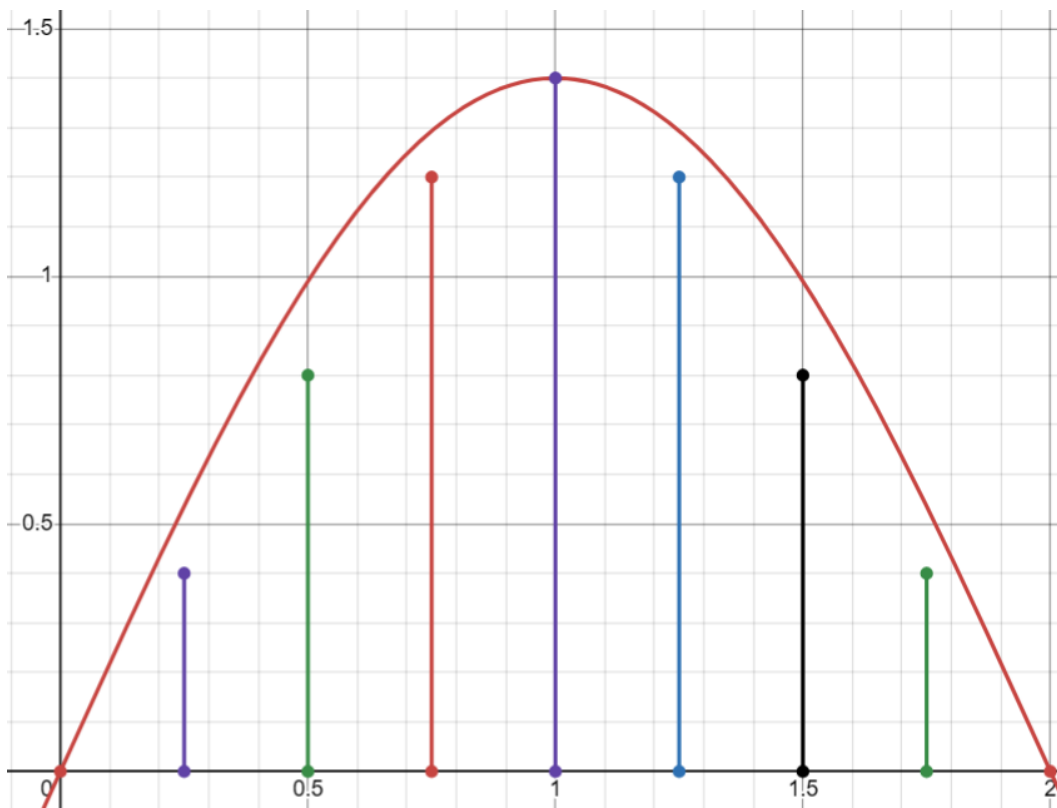


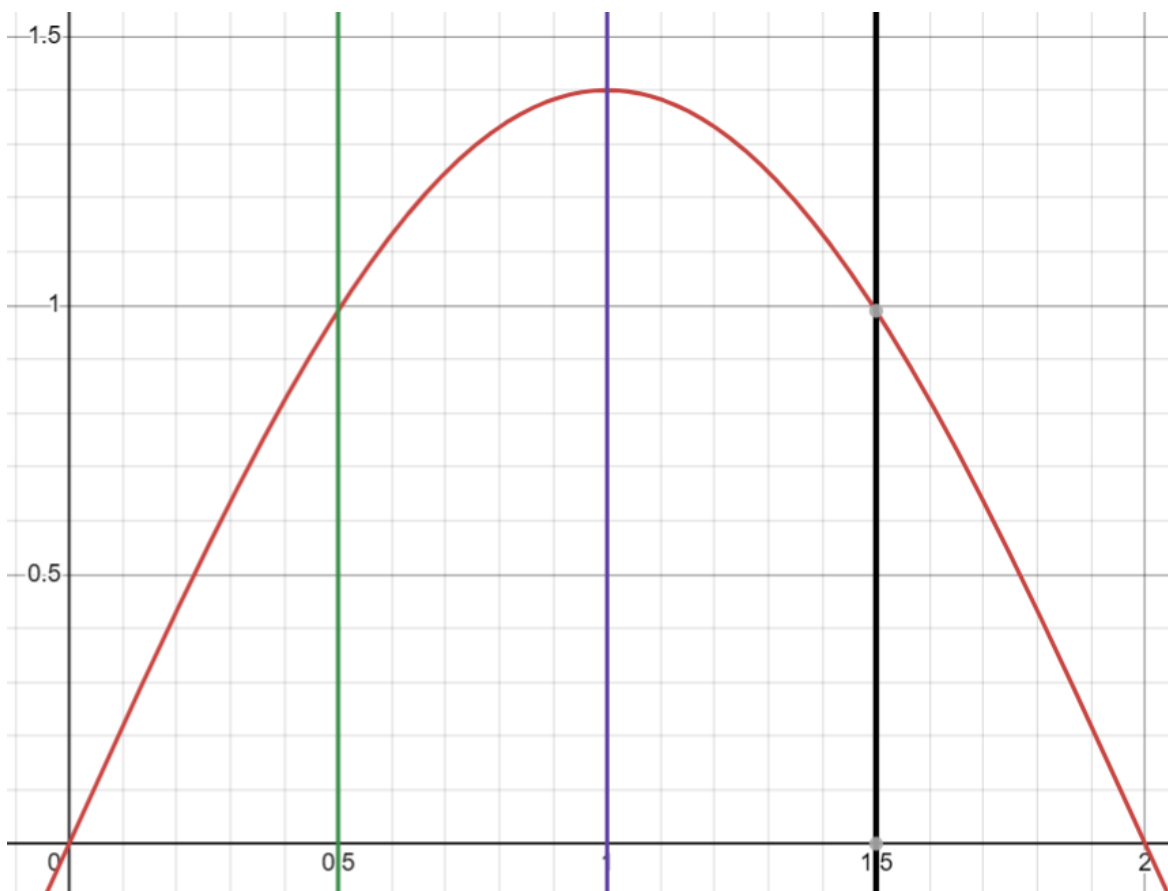
### 3-bit encoder with Sampling Time = 0.25sec :

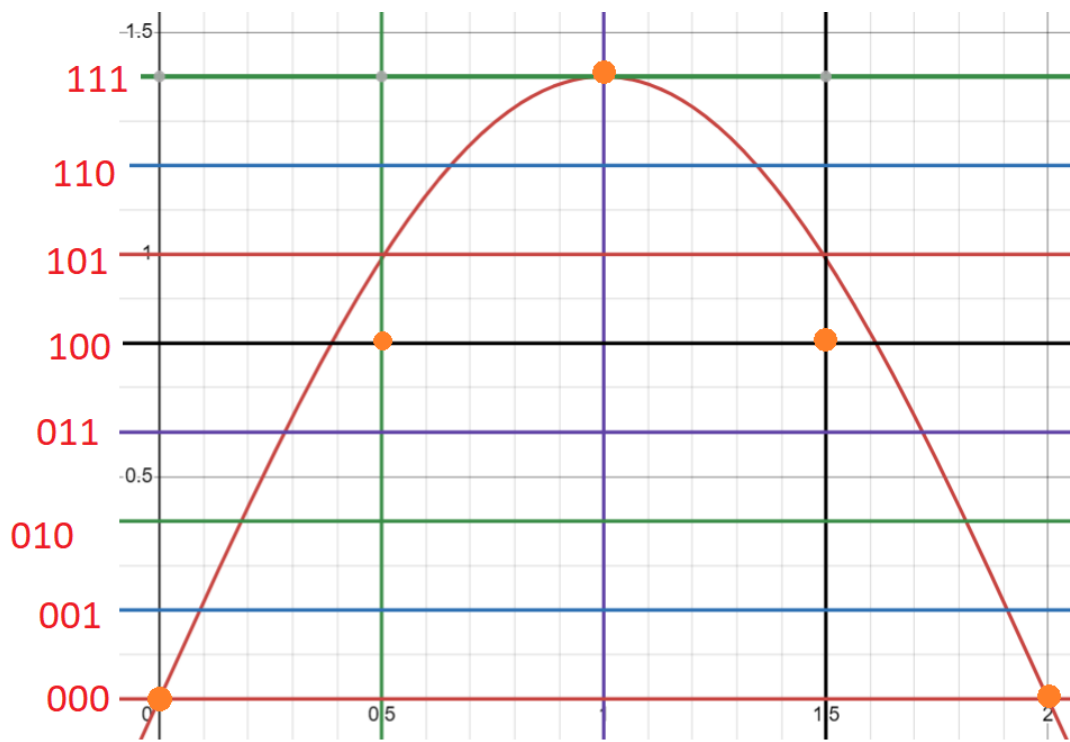


Bit Sequence : 000010100101111101100010000



3-bit encoder with Sampling Time = 0.5sec:

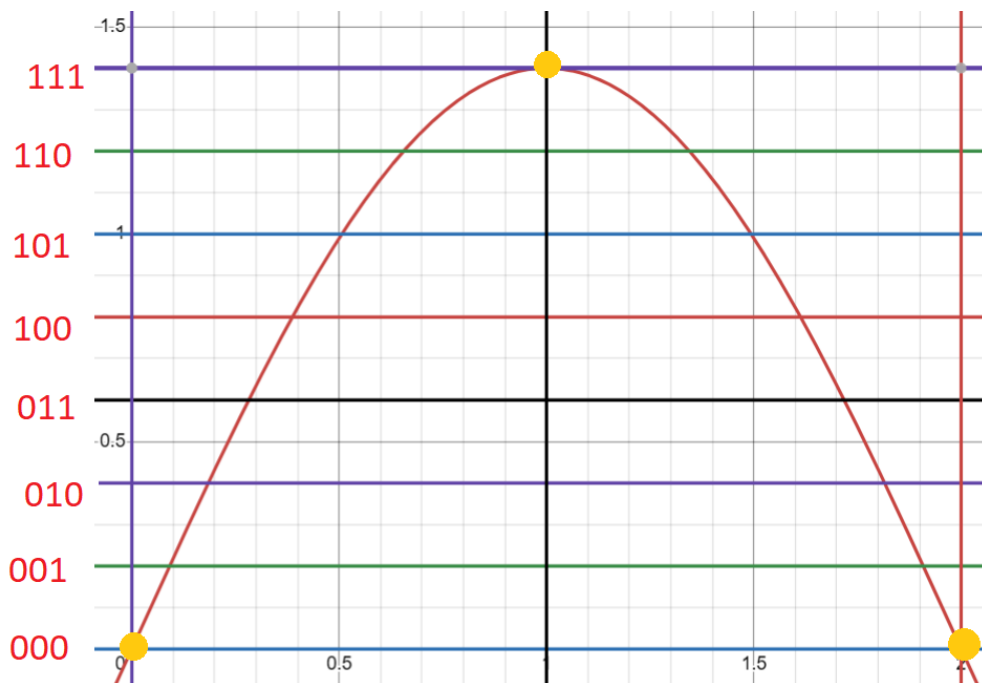
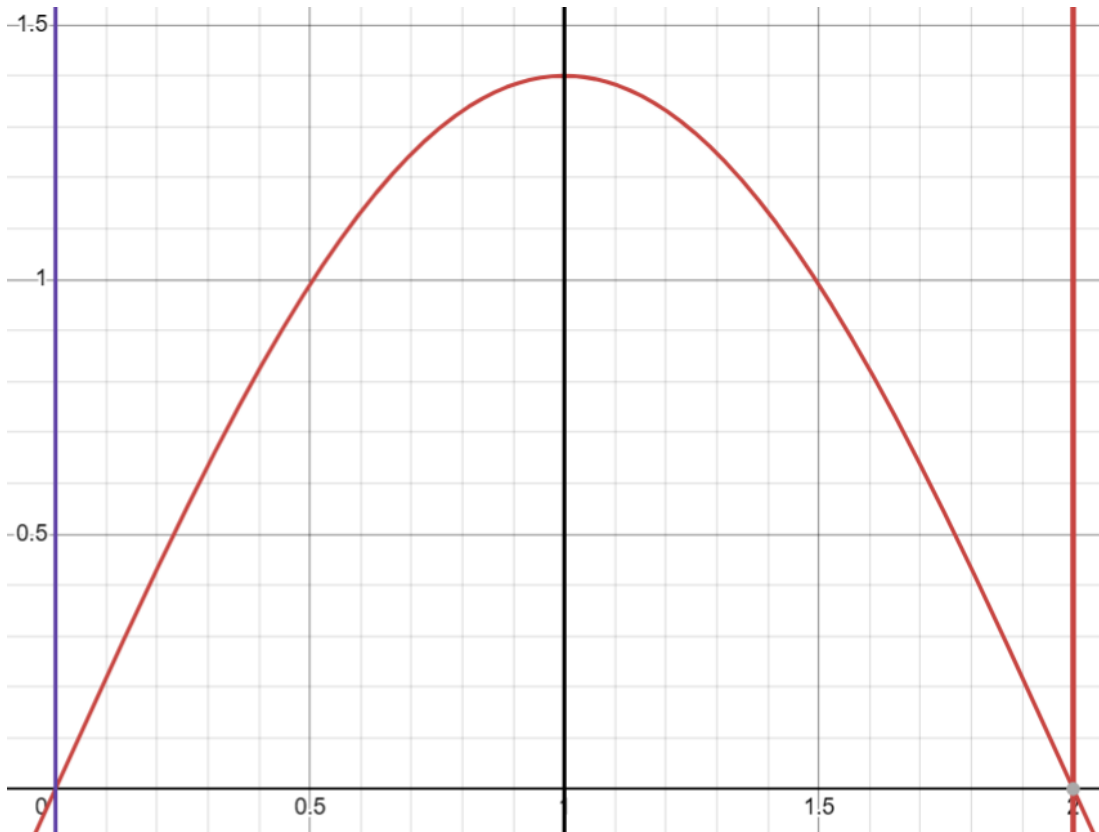




Bit Sequence: 000100111100000



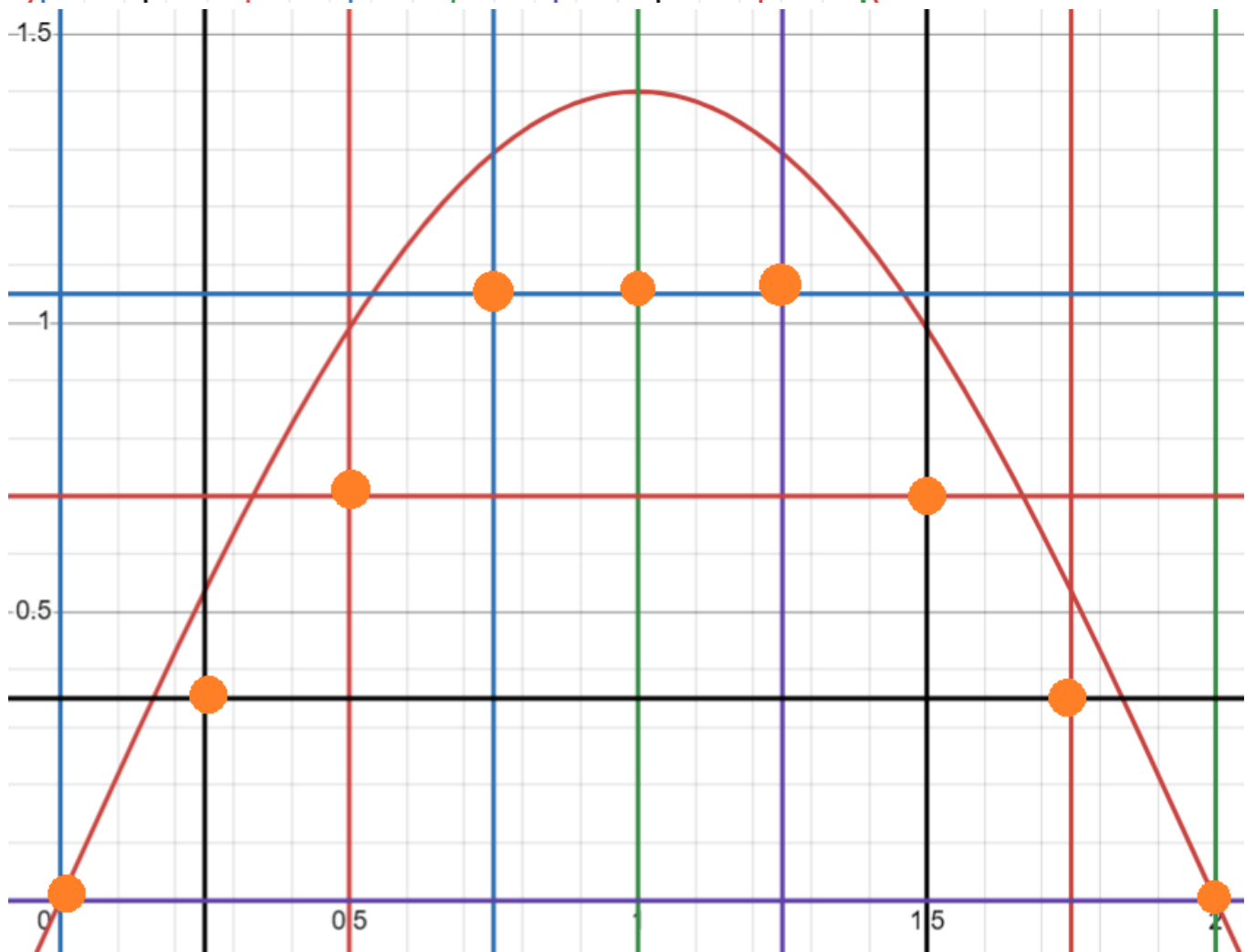
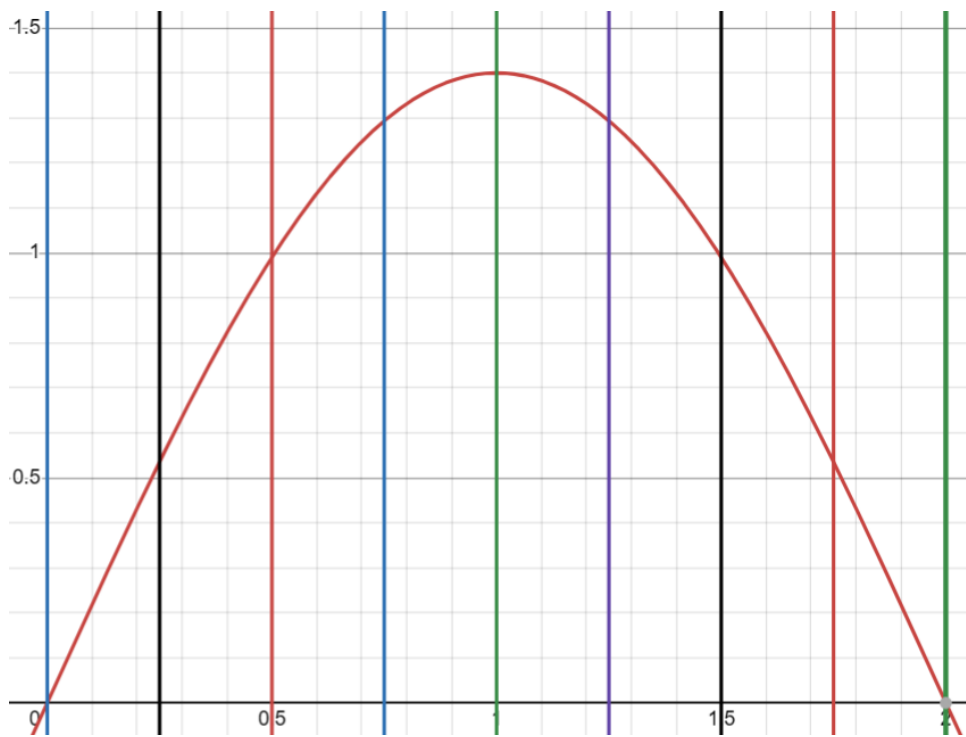
## 3-bit encoder with Sampling Time = 1sec:

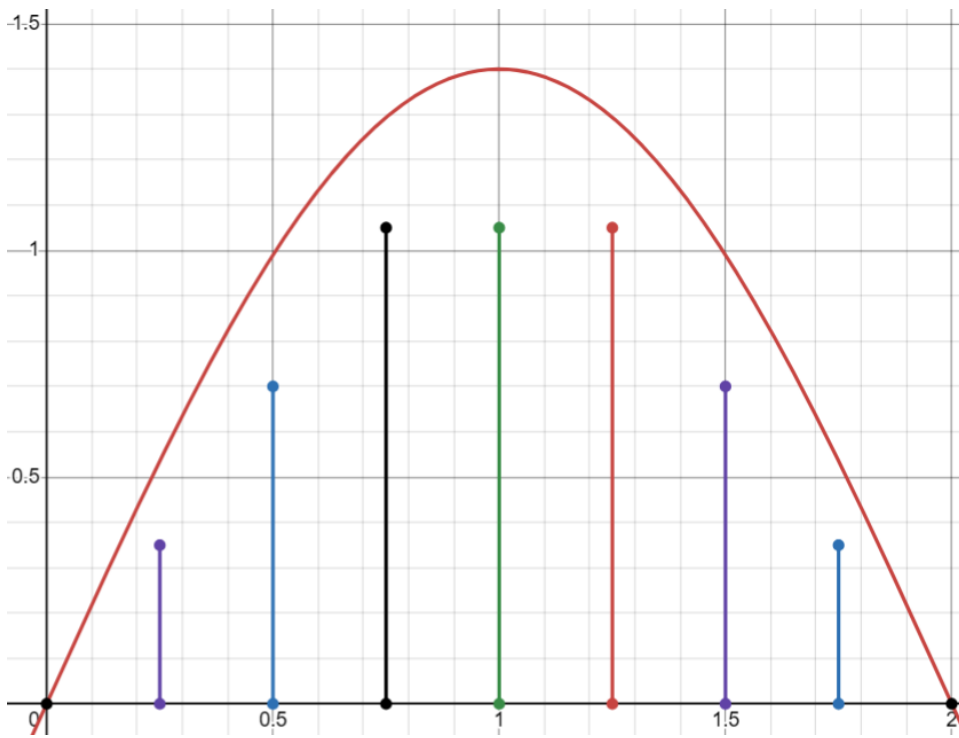


Bit Sequence: 000111000



2-bit encoder with Sampling Time = 0.25sec:





## Conclusion:

It's noticeable that sampling time affects the quality of signal conversion. If we increase sampling time, we will have a short representation of the signal with lower accuracy and storage. While shortening the sampling time leads to creating a highly accurate representation but with much bigger storage.