

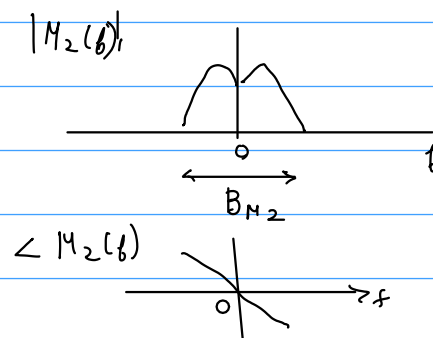
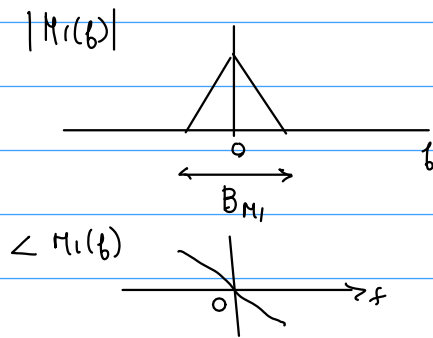
Do the following problems from Upamanyu Madhow

Problem 3.1, 3.3, 3.5, 3.7

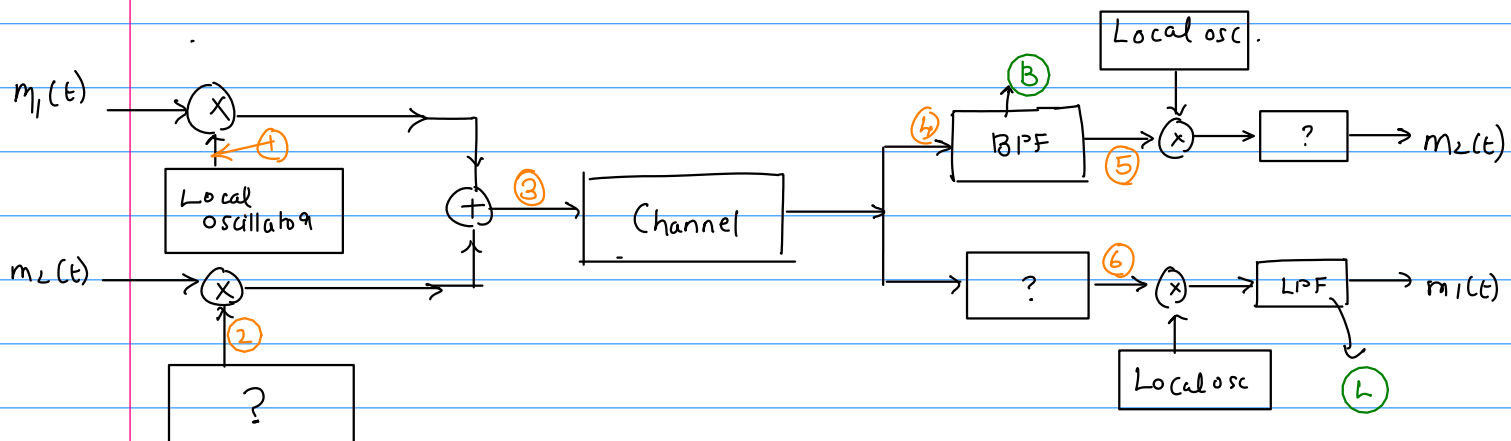
Problem 3.13

Problem 3.14, 3.19

3) Suppose I have two baseband signals $m_1(t)$ and $m_2(t)$ with spectra as shown:



Write down the functions (input \rightarrow output map) of the blocks marked by ? in the following signal flow diagram. Write down what the signals are at ①, ②, ③, ④, ⑤, ⑥. What should be the freq responses of ⑥ and ⑦?



Assume that the channel has the following freq response:

