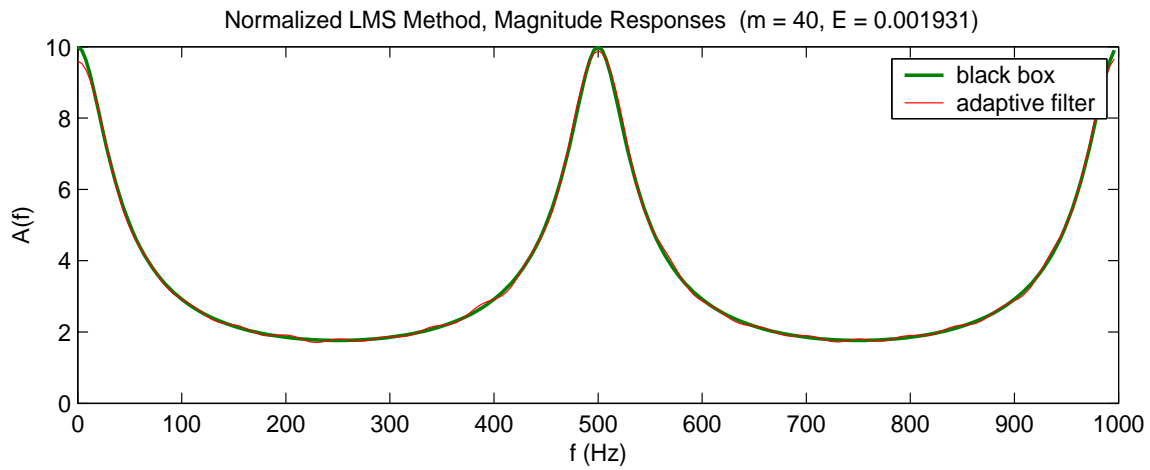


- 9.25 Using the GUI module *g\_adapt* to identify the following black box system using the normalized LMS method with a filter of order  $m = 40$ .

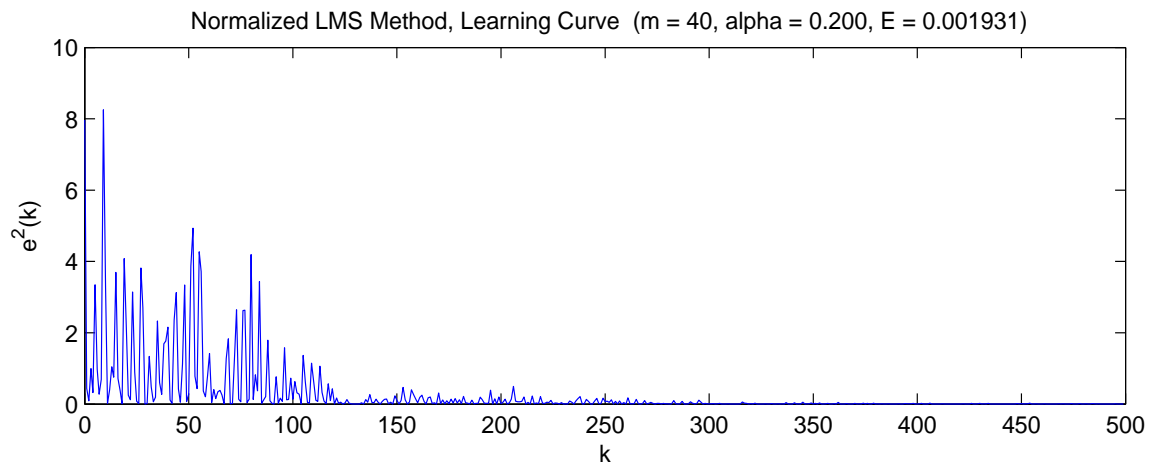
$$H(z) = \frac{3}{1 - 0.7z^{-4}}$$

- (a) Plot the magnitude responses
- (b) Plot the learning curve
- (c) Plot the step sizes

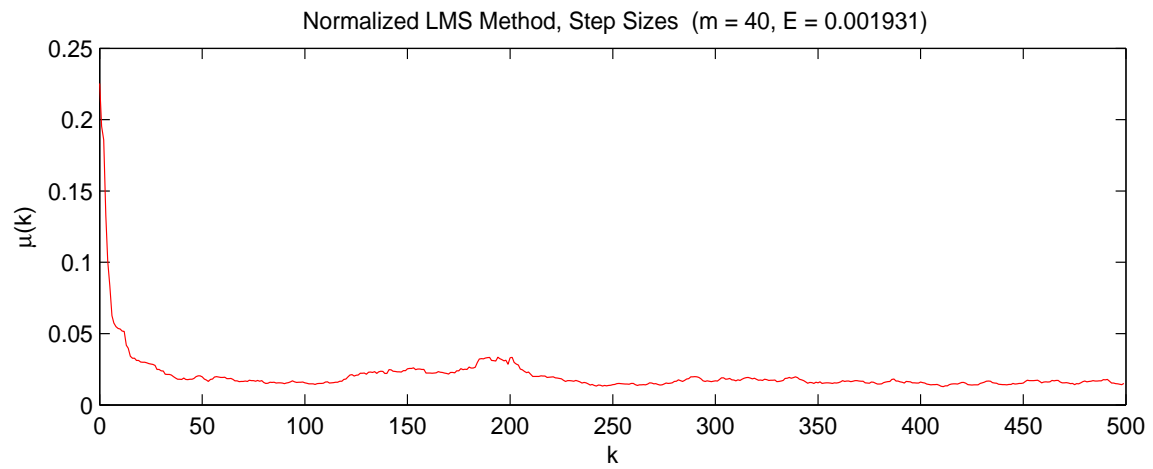
### Solution



(a) Normalized LMS Method: Magnitude Responses



(b) Normalized LMS Method: Learning Curve



(c) Normalized LMS Method: Step Sizes