Dr. Zahid Yaqoob

PROBLEM SET # 1

Q.1: Analytically show that the product of a complex number z and its conjugate is a real number $|z|^2$, i.e., the square of the magnitude of the complex number.

Q.2: Problem B.1-1 of the textbook.

Q.3: Problem B.1-2, parts (d) and (e) of the textbook.

Q.4: Problem B.1-4, parts (a)
Problem B.1-5, parts (b) of the textbook.

Q.5: Use the following link to launch and complete the MATLAB Onramp:
https://www.mathworks.com/products/matlab/getting-started.html

Q.6: Problem B.1-14, parts (c) and (e) of the textbook.

Q.7: Problem B.2-2 of the textbook.

Q.8: Problem B.3-1 of the textbook. Use MATLAB to plot all three functions [parts (a-c)] on the same graph.

Q.9: Problems B.4-2 and B.4-3 of the textbook.

Q.10: Problem B.5-1 of the textbook.

NOTE: Please make sure that your work is neat and clean… and properly presented. If you have any questions, please let me know.