MA423 Lab-06

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Question 4

Here are the tabulated values of n,m and absolute errors:

n	m	norm(Q*R-A)	$norm(Q^{*}Q - I)$	norm(tril(R,-1))	$\operatorname{norm}(\mathbf{R} - \hat{R})$	$\operatorname{norm}(\mathbf{Q} - \hat{Q})$
5	3	$1.4399*10^{-15}$	$4.4409*10^{-16}$	0	$6.4855*10^{-16}$	$3.3014*10^{-16}$
10	10	$3.2313*10^{-15}$	$8.8513*10^{-16}$	0	$5.1091*10^{-15}$	$2.298*10^{-15}$
15	10	$2.5111*10^{-15}$	$7.8556*10^{-16}$	0	$2.9893*10^{-15}$	$8.4859*10^{-16}$
20	12	$2.5062*10^{-15}$	$6.131*10^{-16}$	0	$2.7826*10^{-15}$	$1.0119*10^{-15}$
30	30	$5.1162*10^{-15}$	$9.4233*10^{-16}$	0	$5.8897*10^{-15}$	$2.6702*10^{-15}$