Problem Set 6 - ECON 880
Spring 2022 - University of Kansas

Gunawan, Minh Cao

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Question 1

Question 1			
	$n = 3$	$n = 5$	$n = 11$
Trapezoid	0.081359	0.041771	0.01481
Gauss-Chebyshev	0.036964	0.012382	0.0024208
Gauss-Legendre	0.0051406	0.0015098	0.00020904

- True value of the integral = 34.920804

Question 2

- True value of the integral = 34.920804

- It is clear that the pseudo-random error does not converge to zero, however it is bounded by 0.08. The) uniformly spaced grid method converges to zero, however if the number of nodes are less than 3000, the pseudo-random method does better the uniformly spaced grid since the lower bound of the uniformly spaced grid method is 0.1.
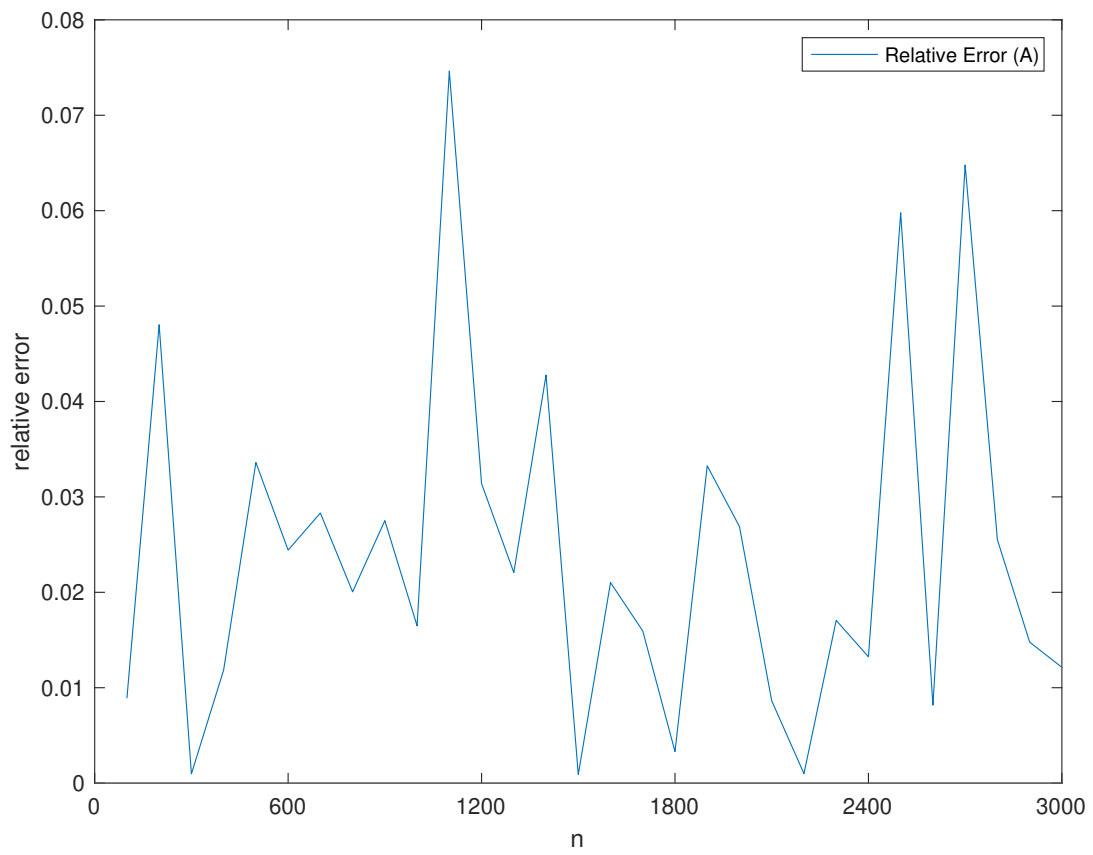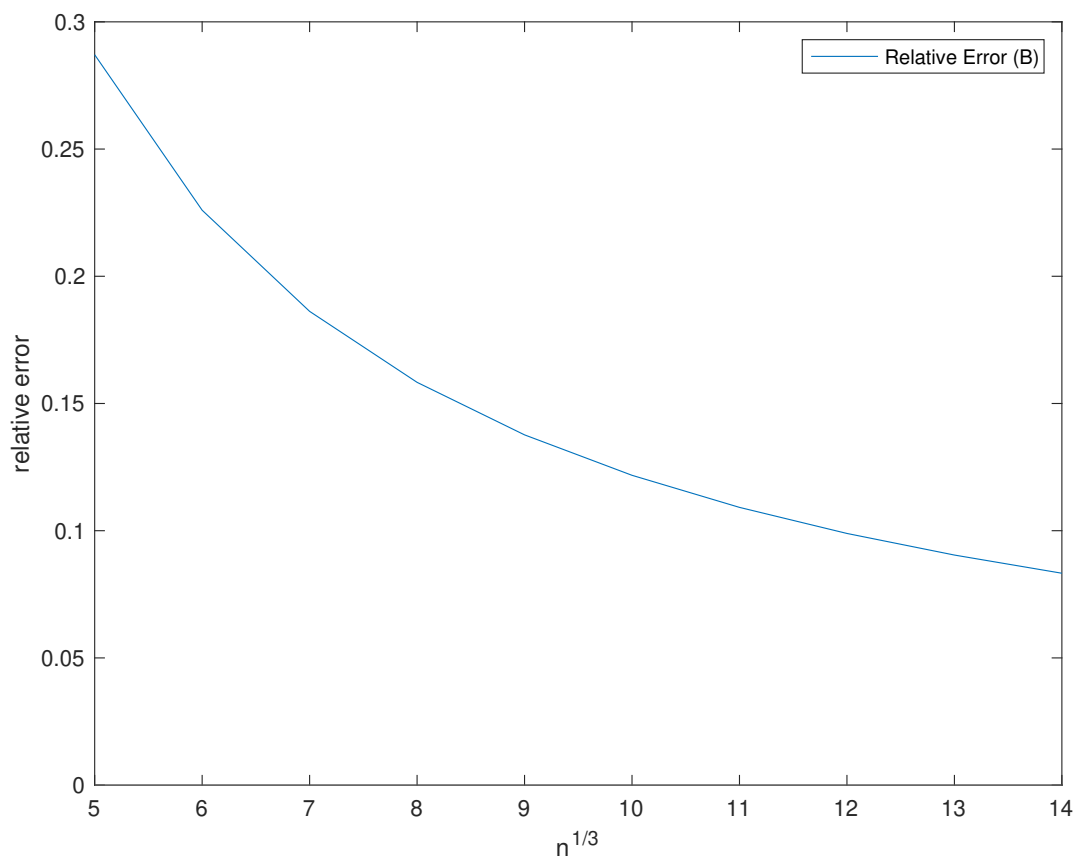
Figure 1: Pseudo-random error

Figure 2: Uniformly spaced grid error