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Analyzing Albillo's Matrix No. 3 with the CC-40

Message #1 Posted by [Palmer O. Hanson, Jr.](#) on 13 June 2005, 10:18 p.m.

In an earlier thread Gene presented results from processing Valentin Albillo's matrix no. 1 with the CC-40. Valentin suggested that additional tests should be submitted including results using his matrix no. 2 and matrix no. 3. I submitted the matrix no. 2 results on May 31. The matrix no. 3 results follow.

Analysis of Albillo 3 on the CC-40.

Determinant of Albillo 3 = -1.0043809112

where as previously noted the minus sign is a recognized problem with the Mathematics module of the CC-40. The Mathematics module of the TI-74 gets correct signs for determinants.

Inverse of matrix no. Albillo 3:

292945582.4049	699654.87421177	-1933850.970318	4743223.358971	-21244412.115987	75992713.666666	-293114079.2352
12055.18742001	28.873865387142	-79.651363024570	195.1448859989	-874.1700319661	3127.2999426923	-12062.15704319
-90022.61920092	-215.0580829528	594.3965345195	1457.6143899226	6528.3995064483	-23352.69408068	90074.39236040
510682.74419247	1219.6566633336	-3371.2309790954	8268.7755102080	-37034.75422017	132475.63576146	-510976.45736443
-4306738.560514	-10285.93806257	28430.44848146	-69732.50817077	312324.73338398	-1117206.616839	4309215.708312
36726586.086149	87715.72519643	-242446.8618433	594657.85651607	-2663411.829143	9527206.155713	-36747710.541804
-292947244.1249	-699658.85682450	1933861.922259	4743250.241096	21244532.588037	-75993144.778155	293115741.9509

Determinant of Inverse of Albillo 3 = -0.9817382846

Albillo 3 x its inverse:

0.99	0.000001	0.0001	0.0002	0	0.0002	0
-0.01	0.999999	-0.000022	0.0001	-0.0001	-0.0001	0.01
-0.005	-0.000008	1.000008	-0.0001	0.0002	-0.0009	0.0014
-0.0045	-0.000009	0.000015	0.999946	0.0001	-0.0009	0.0024
-0.0021	-0.000005	0.000007	-0.000025	1.0001	-0.0003	0.0011
-0.0002	0.000001	-0.000003	0.000002	0	1	-0.0004
0	0.00001	0	0	-0.0004	0.0011	0.99

Determinant of product = -0.9817382846

Norms for Albillo 3 x its inverse - the identity matrix as suggested by Rodger Rosenbaum

Row norm = 0.020323

Column norm = 0.0318

Frobenius norm = 0.0214956891

What's next? I have been so busy transferring all these numbers from my CC-40 to the Forum that I have had very little time to look at the results. Hopefully, I can present some observations later this week.

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