

polyhedron02 sub-program for polyhedron V2

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ML-02 DETERMINANT, MATRIX. & SIMUL EQ.

Step	Procedure	Enter	Press	Display
1	Enter order of matrix	n	A	n
2	Enter elements starting column 1 (To correct an entry in column i, simply enter j and press B. Then reenter the entire column.	1 a11 a21 . an1 a12 . ann	B R/S R/S . R/S R/S . R/S	1 a11 a21 . an1 a2n . ann
3	Calculate Determinate		C	
4	Enter elements column vector b starting with b1.	1 b1 . bn	D R/S . R/S	1 b1 . bn
5	Calculate x		CLR E	
6	Display elements starting with xi	1	2nd A R/S	xi
7	Display xi only To solve fo new vector b, repeat step 4-7 only	i	2nd A	i
8	Calculate A-1		CLR 2nd B	1
9	Display elements of A-1 starting with column 1 through n.	1	2nd C R/S R/S R/S	1 a11-1 a21-1 ann-1



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LBL D'
+ ( CE - 1 ) * RCL 07 + 7 =
RTN
LBL C'
GTO 08 11
1 INV SUM 01 RCL 07 INV SUM 02
RTN
INV DSZ 05 00 51
- 1 SUM 01 RCL 07 SUM 02 RC* 01 * RC* 02
GTO 00 30
RTN
INV DSZ 05 00 69
- SBR 00 20 RC* 01 * RC* 02
GTO 00 52
RTN
LBL A
STO 07 NOP
NOP
RTN
LBL B
- X/T 1 =
* RCL 07 + 8 =
STO 01 X/T
RTN
NOP
ST* 01
RTN
X/T 1 SUM 01 X/T
GTO 00 93
LBL C
RCL 07 STO 05 + X2 + 7 =
STO 01 RCL 05 ST* 01 1 INV SUM 01
DSZ 05 01 18
1 STO 04 STO 06 RCL 04 + 7 =
STO 03 - RCL 07 - 8 =
STO 05 RCL 04 D' STO 02 RC* 02 IXI X/T
INV DSZ 05 01 88
1 SUM 02 RC* 02 IXI
INV GE 01 59
X/T RCL 07 + RCL 05 + 8 =
STO 03
GTO 01 59
RCL 03 X/T RCL 04 + 7 =
EQ 02 28
STO 02 1 +/- PRD 06 RCL 07 + 1 =
STO 05 RC* 02 EX* 03 ST* 02 RCL 07 SUM 02 SUM 03
DSZ 05 02 12
RCL 04 D' STO 01 RC* 01 PRD 06 CP
EQ 03 31
RCL 07 STO 05 RCL 04 D' STO 02 + RCL 05 - RCL 04 =
STO 03 RC* 03 / RC* 02 =
STO 01 ST* 03 RCL 07 SUM 02 SUM 03 X2 + 8 =
X/T RCL 03
GE 02 97
RCL 01 +/- * RC* 02 =
SM* 03
GTO 02 69
1 INV SUM 05 RCL 05 X/T RCL 04
EQ 03 12

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GTO 02 45
1 SUM 04 RCL 07 X/T RCL 04
EQ 03 26
GTO 01 35
D' STO 01 RC* 01 PRD 06 RCL 06 NOP NOP
NOP
RTN
NOP NOP NOP NOP NOP NOP NOP NOP NOP NOP
LBL D
STO 05
RTN
STO 03 RCL 07 X2 + 7 =
STO 01 RCL 05 X/T RCL 07
INV GE 03 54
1 SUM 01 RC* 01
INV EQ 03 74
RCL 07 SUM 01 1 SUM 05 RCL 03 ST* 01 NOP
RTN
GTO 03 55
LBL E
1 STO 04 RCL 07 + X2 + 7 =
STO 01 RCL 04 STO 05 - RCL 07 + 7 =
STO 02 0 SBR 00 30 + 1 SUM 01 RC* 01 =
ST* 01 1 SUM 04 RCL 04 X/T RCL 07
GE 04 04
1 STO 04 7 + ( RCL 07 + 1 ) X2 =
STO 01 - RCL 07 - RCL 04 STO 05 =
STO 02 0 SBR 00 52 + SBR 00 20 RC* 01 =
/ RC* 02 =
ST* 01 1 SUM 04 RCL 04 X/T RCL 07
GE 04 52
NOP 1
RTN
LBL A'
+ X/T 7 + RCL 07 * ( CE + 1 ) =
STO 01 X/T
RTN
RC* 01 NOP
RTN
1 SUM 01
GTO 05 25
LBL B'
1 STO 04 RCL 04 D' =
STO 01 RC* 01 1/X ST* 01 1 SUM 04 RCL 04 X/T RCL 07
GE 05 40
1 +/- SUM 04 1 STO 03 RCL 04 D' STO 01 - RCL 03 STO 05 =
STO 02 RC* 01 * RC* 02 +/- SBR 00 52 =
* SBR 00 20 RC* 02 =
ST* 01 1 SUM 03 RCL 04 X/T RCL 03
INV EQ 05 69
1 STO 03 INV SUM 04 RCL 04 X/T 1
INV EQ 05 69
RCL 04 D' STO 01 + RCL 03 STO 05 =
STO 02 RC* 02 +/- SBR 00 30 * 1 SUM 01 =
ST* 01 1 SUM 03 RCL 03 X/T RCL 07 - RCL 04 =
GE 06 27
1 SUM 04 STO 03 RCL 07 X/T RCL 04
INV EQ 06 27
1 STO 04 RCL 04 STO 05 D' STO 03 RCL 05 D' STO 01 RCL 03 STO 02 RCL

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07 - RCL 05 + 1 =
EXC 05 X/T RC* 03 +/- SBR 00 30 =
+/- ST* 03 RCL 07 SUM 03 X/T + 1 =
STO 05 X/T
GE 06 92
X/T RCL 04
EQ 08 08
+ 1 =
STO 05 RCL 04 D' + 1 =
STO 03 RCL 05 D' STO 02 RCL 03 STO 01 RCL 07 - RCL 05 + 1 =
EXC 05 X/T RC* 01 * RC* 02 +/- SBR 00 30 =
+/- ST* 03 1 SUM 03 + X/T =
STO 05 X/T RCL 07
GE 07 55
1 SUM 04
GTO 06 85
NOP 1
RTN
STO 03 X/T RCL 07
INV GE 08 10
+ STO 05 X2 + 7 =
STO 01 0 STO 04 RC* 01
EQ 08 45
1 INV SUM 01
DSZ 05 08 32
RCL 05 - 1 =
* RCL 07 + 7 =
STO 01 X/T
RTN
1 SUM 01 SUM 04 RC* 01 NOP
RTN
RCL 04 X/T RCL 07
INV EQ 08 60
1 + RCL 03 =
C'
GTO 08 60
LBL E'
C CP
EQ 08 95
B' RCL 06
RTN

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L A B E L S
001 19 D'
016 18 C'
071 11 A
078 12 B
106 13 C
351 14 D
400 15 E
507 16 A'
536 17 B'
888 10 E'

Adr	Branch.
020	058 71 SBR
020	480 71 SBR
020	593 71 SBR
030	048 61 GTO
030	426 71 SBR
030	643 71 SBR
030	715 71 SBR
030	781 71 SBR
051	031 97 DSZ
052	066 61 GTO
052	476 71 SBR
052	588 71 SBR
069	053 97 DSZ
093	102 61 GTO
118	126 97 DSZ
135	323 61 GTO
159	171 77 GE
159	185 61 GTO
188	160 97 DSZ
212	224 97 DSZ
228	196 67 EQ
245	309 61 GTO
269	294 61 GTO
297	282 77 GE
312	306 67 EQ
326	320 67 EQ
331	238 67 EQ
354	371 77 GE
355	396 61 GTO
374	380 67 EQ
404	446 77 GE
452	500 77 GE
525	532 61 GTO
540	559 77 GE
569	610 67 EQ
569	624 67 EQ
627	665 77 GE
627	679 67 EQ
685	805 61 GTO
692	733 77 GE
755	799 77 GE
808	739 67 EQ
810	817 77 GE
811	017 61 GTO
832	841 97 DSZ
845	834 67 EQ
860	875 67 EQ
860	884 61 GTO
895	891 67 EQ
B'	894 17 B'
C	889 13 C
C'	883 18 C'

Reg.	Instr.
01	022 44 SUM
	037 44 SUM
	043 73 RC*
	061 73 RC*
	089 42 STO
	094 72 ST*
	099 44 SUM
	116 42 STO
	120 72 ST*
	124 44 SUM
	231 42 STO
	233 73 RC*
	265 42 STO
	285 43 RCL
	327 42 STO
	329 73 RC*
	363 42 STO
	375 44 SUM
	377 73 RC*
	385 44 SUM
	392 72 ST*
	411 42 STO
	431 44 SUM
	433 73 RC*
	436 72 ST*
	462 42 STO
	483 73 RC*
	490 72 ST*
	521 42 STO
	525 73 RC*
	530 44 SUM
	544 42 STO
	546 73 RC*
	549 72 ST*
	572 42 STO
	582 73 RC*
	599 72 ST*
	630 42 STO
	648 44 SUM
	651 72 ST*
	695 42 STO
	762 42 STO
	775 73 RC*
	827 42 STO
	832 73 RC*
	839 44 SUM
	856 42 STO
	861 44 SUM
	865 73 RC*
02	027 44 SUM
	041 44 SUM



D'	152	19	D'
D'	230	19	D'
D'	247	19	D'
D'	326	19	D'
D'	542	19	D'
D'	571	19	D'
D'	629	19	D'
D'	689	19	D'
D'	694	19	D'
D'	749	19	D'
D'	757	19	D'

	046	73	RC*
	064	73	RC*
	153	42	STO
	155	73	RC*
	165	44	SUM
	167	73	RC*
	199	42	STO
	212	73	RC*
	216	72	ST*
	220	44	SUM
	248	42	STO
	262	73	RC*
	271	44	SUM
	289	73	RC*
	423	42	STO
	473	42	STO
	487	73	RC*
	580	42	STO
	585	73	RC*
	596	73	RC*
	638	42	STO
	640	73	RC*
	699	42	STO
	758	42	STO
	778	73	RC*
03	140	42	STO
	183	42	STO
	188	43	RCL
	214	63	EX*
	222	44	SUM
	257	42	STO
	259	73	RC*
	267	72	ST*
	273	44	SUM
	280	43	RCL
	292	74	SM*
	355	42	STO
	390	43	RCL
	567	42	STO
	575	43	RCL
	602	44	SUM
	607	43	RCL
	614	42	STO
	633	43	RCL
	654	44	SUM
	656	43	RCL
	671	42	STO
	690	42	STO
	697	43	RCL
	712	73	RC*
	720	72	ST*
	724	44	SUM
	753	42	STO



04	760	43	RCL
	786	72	ST*
	789	44	SUM
	811	42	STO
	880	43	RCL
04	131	42	STO
	135	43	RCL
	150	43	RCL
	191	43	RCL
	228	43	RCL
	245	43	RCL
	254	43	RCL
	304	43	RCL
	313	44	SUM
	318	43	RCL
	402	42	STO
	413	43	RCL
	439	44	SUM
	441	43	RCL
	450	42	STO
	468	43	RCL
	493	44	SUM
	495	43	RCL
	538	42	STO
	540	43	RCL
	552	44	SUM
	554	43	RCL
	564	44	SUM
	569	43	RCL
	604	43	RCL
	617	44	SUM
	619	43	RCL
	627	43	RCL
	662	43	RCL
	669	44	SUM
	676	43	RCL
	683	42	STO
	685	43	RCL
	737	43	RCL
	747	43	RCL
	803	44	SUM
	830	42	STO
	863	44	SUM
	869	43	RCL
05	109	42	STO
	118	43	RCL
	148	42	STO
	178	43	RCL
	210	42	STO
	243	42	STO
	251	43	RCL
	299	44	SUM



	301	43	RCL
	352	42	STO
	365	43	RCL
	388	44	SUM
	415	42	STO
	470	42	STO
	577	42	STO
	635	42	STO
	687	42	STO
	692	43	RCL
	704	43	RCL
	709	48	EXC
	730	42	STO
	745	42	STO
	755	43	RCL
	767	43	RCL
	772	48	EXC
	794	42	STO
	821	42	STO
	845	43	RCL
06	133	42	STO
	203	49	PRD
	235	49	PRD
	331	49	PRD
	333	43	RCL
	895	43	RCL
07	009	43	RCL
	024	43	RCL
	039	43	RCL
	072	42	STO
	084	43	RCL
	107	43	RCL
	143	43	RCL
	175	43	RCL
	205	43	RCL
	218	43	RCL
	241	43	RCL
	269	43	RCL
	315	43	RCL
	357	43	RCL
	368	43	RCL
	383	43	RCL
	404	43	RCL
	418	43	RCL
	444	43	RCL
	455	43	RCL
	465	43	RCL
	498	43	RCL
	512	43	RCL
	557	43	RCL
	659	43	RCL
	673	43	RCL



	701	43	RCL
	722	43	RCL
	764	43	RCL
	797	43	RCL
	814	43	RCL
	851	43	RCL
	872	43	RCL

