

1st WSI Summer School on Scientific Computing
'Boot Camp'

June 17th to June 21st 2013

FURTHER INFORMATION AND ENROLLMENT: INFO@WOODRUFFSCIENTIFIC.COM

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10 REM AGENDA
20 REM MONDAY AM: HISTORY OF SCIENTIFIC COMPUTING
30 REM MONDAY PM: VISIT TO PAUL ALLEN MUSEUM, AND DIGEST
40 REM TUESDAY PM: FORTRAN PRIMER AND WORKED EXAMPLES
50 REM TUESDAY PM: C++ PRIMER AND WORKED EXAMPLES
60 REM WEDNESDAY AM: OCTAVE, PYTHON PRIMER AND WORKED EXAMPLES
70 REM WEDNESDAY PM: SYSADMIN (SVN, SLURM, BEST PRACTICES)
80 REM THURSDAY AM: FEM / PDE PRIMER
90 REM THURSDAY PM: VERIFICATION AND VALIDATION PRIMER
100 REM FRIDAY AM: THEMES IN CONTEMPORARY COMPUTING I
110 REM FRIDAY PM: THEMES IN CONTEMPORARY COMPUTING II
120 REM ALL RESOURCES PROVIDED
130 ON ERROR GOTO 450
140 MODE 7
150 @%=&2020A
160 REPEAT
170 PRINT "What are the three coefficients ";
180 INPUT A,B,C
190 DISCRIM=B^2-4*A*C
200 IF DISCRIM<0 THEN PROCcomplex
210 IF DISCRIM=0 THEN PROCcoincident
220 IF DISCRIM>0 THEN PROCreal
230 PRINT'''
240 UNTIL FALSE
250 END
260
270 DEF PROCcomplex
280 PRINT "Complex roots X=";-B/(2*A)
290 PRINT " +/ "; SQR(-DISCRIM) /(2*A) "i"
300 ENDPROC
310
320 DEF PROCcoincident
330 PRINT"Co-incident roots X=";B/(2*A)
340 ENDPROC
350
360 DEF PROCreal
370 X1=(-B+SQR(DISCRIM))/(2*A)
380 X2=(-B-SQR(DISCRIM))/(2*A)
390 PRINT "Real distinct roots X=";X1;" and X=";X2
400 ENDPROC
450 @%=10:REPORT:PRINT
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