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{JoAq} 5·REM·graph·plotter
{PxAs} 7·REM·by·M·MERRYFIELD
{InAo} 8·REM·Public·domain
{JnAw} 10·SYMBOL·242,96,144,48,192,240,0,0,0
{CtAx} 20·SYMBOL·243,96,16,96,16,96,0,0,0
{FiAx} 30·SYMBOL·244,16,48,80,248,16,0,0,0
{OpAq} 40·REM·opening·screen
{LpBi} 50·CLS:LOCATE·13,1:PRINT"GRAPH··PLOTTER"
{GqDo} 60·LOCATE·1,4:PRINT"··This·Program·displays·the··curves·of:-
      Linear,·Quadratic,·Cubic·and·Quartic····Equations."
{EpCp} 70·PRINT:PRINT"·These·terms·relate·to·the·highest·powerof·'x'·in·the·
      equation·as·follows:-"
{CkCl} 80·LOCATE·14,11:PRINT"LINEAR·...·x":LOCATE·14,12:PRINT"··"QUADRATIC··x";

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CHR\$(242)

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{FsCu} 90·LOCATE·14,13:PRINT"CUBIC·...·x";CHR$(243):LOCATE·14,14:PRINT"
QUARTIC·...·x";CHR$(244)
{LkBu} 100·PRINT:PRINT:PRINT"··The·longest·equation·is·of·the·form;"
{EjCo} 110·PRINT:PRINT"·······ax";CHR$(244);"+bx";CHR$(243);"+cx";CHR$(242);
"+dx+e·=-·y"
{KxDn} 120·PRINT:PRINT"··Enter·the·values·of·the·co-
efficients·a,b,c,d,e·(seperated·by·a·comma)·Enter·0·if·not·required."
{MiBu} 130·PRINT:PRINT"·······PRESS·A·KEY·TO·CONTINUE"
{DuAw} 140·WHILE·INKEY$=""·GOTO·140:WEND
{HmAs} 150·REM·display·screen
{EwBl} 160·CLEAR·INPUT:MODE·1:PRINT"FORMULA:"
{HkAs} 170·WINDOW·1,40,25,25
{GpAt} 180·WINDOW·#1,9,40,1,1
{JwBu} 190·MOVE·0,18,2:DRAW·0,383:DRAW·639,383:DRAW·639,18:DRAW·0,18·
{OmAx} 200·ORIGIN·320,199,0,639,383,18
{PtBp} 210·MOVE·-320,0:DRAW·319,0:MOVE·0,182:DRAW·0,-183
{KwAs} 220·TAG:FOR·x=-8·TO·8
{LkAx} 230·MOVE·40*x,4:DRAW·40*x,-4:NEXT·x
{GoAo} 240·FOR·y=-4·TO·4
{GpBk} 250·MOVE·4,40*y:DRAW·-4,40*y:NEXT·y
{AlBo} 260·MOVE·-300,-8:PRINT"·-7";:MOVE·284,-8:PRINT"7";
{KjAl} 270·TAGOFF
{GuAl} 280·sc=1
{AvBn} 290·REM·read·formula·and·display·graph
{CsBq} 300·CLEAR·INPUT:INPUT"Enter·formula:-·",a,b,c,d,e
{PlCw} 310·PRINT#1,a;"x";CHR$(244);"+";b;"x";CHR$(243);"+";c;"x";CHR$(242);"+";
d;"x";"+";e;"·=-·0"
{OsBx} 320·TAG:MOVE·-52,160,2:PRINT·sc*4;:MOVE·-52,-152:PRINT·sc*-4;:TAGOFF
{JmAu} 330·FOR·x=-8·TO·8·STEP·0.02
{MiAx} 340·y=a*x↑4+b*x↑3+c*x↑2+d*x+e
{JjBk} 350·IF·y<(10*sc)·OR·y>(-10*sc)·THEN·370
{AtAs} 360·PLOT·40*x,40*y/sc,3
{PuAj} 370·NEXT
{LpBo} 380·PRINT"MENU:-·1.OVERLAY·2.RE-SCALE·3.NEW·4.END"
{CmCx} 390·IF·INKEY(64)=0·OR·INKEY(13)=0·THEN·290·ELSE·IF·INKEY(65)=0·OR·INKEY
(14)=0·THEN·410·
{KpCx} 400·IF·INKEY(57)=0·OR·INKEY(5)=0·THEN·150·ELSE·IF·INKEY(56)=0·OR·INKEY
(20)=0·THEN·420·ELSE·390
{ErCi} 410·CLEAR·INPUT:INPUT"INPUT·SCALE·(Multiples·of·0.25)·",sc:GOTO·320
{FqAn} 420·MODE·1:END
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