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DECUS NO.	FOCAL8-203
TITLE	GRAPH SKETCHING
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COMPANY	Trinity Grammar School Melbourne, Australia
DATE	October 31, 1971
SOURCE LANGUAGE	FOCAL '69

GRAPH SKETCHING

DECUS Program Library Write-up

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This program should prove useful in the study of probability, statistics, areas under curve, etc. After the program is started the computer asks a number of questions needed to sketch the graph. After the necessary input it then sketches the graph and types the X and Y values for the points plotted.

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*W
C-FOCAL, 1969

01.10 C-PROGRAM FOR SKETCHING GRAPHS.
01.20 C-PETER CORNISH.
01.30 C-31 OCTOBER, 1971.

02.10 E
02.20 T !!!!!,"WHAT IS THE EQUATION? (IN THE FORM Y=.....X.....)
02.30 T !,"(TYPE 'S Y=', YOUR EQUATION, 'RETURN',
02.40 T " 'G 3.1', THEN 'RETURN')",!
02.50 M 5.1

03.10 A !!!!!,"WHAT IS THE LOWEST VALUE FOR X",A,!
03.20 A "WHAT IS THE HIGHEST VALUE FOR X",B,!
03.30 A "HOW MANY VALUES OF X DO YOU WANT PLOTTED",C,!
03.35 A "HOW MANY SPACES ACROSS THE PAGE DO YOU WANT THE GRAPH
03.36 A " TO TAKE UP",MN,!!!!
03.40 S C=(B-A)/(C-1)
03.50 S X=A
03.60 D 5.1
03.70 I (Y-Z)3.8;S Z=Y
03.80 I (B-X)3.9,3.9;S X=X+C;G 3.6
03.90 S X=A
03.91 D 5.1

04.10 I (P-Y)4.2;S P=Y
04.20 I (B-X)4.3,4.3;S X=X+C;G 3.91
04.30 S P=FABS(P);S Z=MN/(Z+P);S P=P+((72-MN)/2)
04.33 T !!!!!,"THE GRAPH IS:",!!!
04.40 F X=A,C,B;T "*",!;D 5.1;F J=1,(P+Y)*Z;T " "
04.50 T "*",Z,!!!!,"THE VALUES ARE:",!!!!," X Y
04.60 F X=A,C,B;D 5.1;T !,X," ",Y
04.70 Q

05.10 S
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