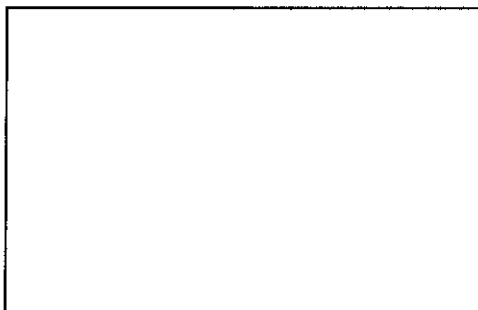


Graphing Exponential and Logarithmic Data

1. Enter each data set into your calculator's Stat editor.
2. Construct a scatterplot for the data.
3. Determine the graph family for the data (exponential, logarithmic, etc.).
4. Use the regression feature of your calculator to determine a best fit equation for the data.

A.

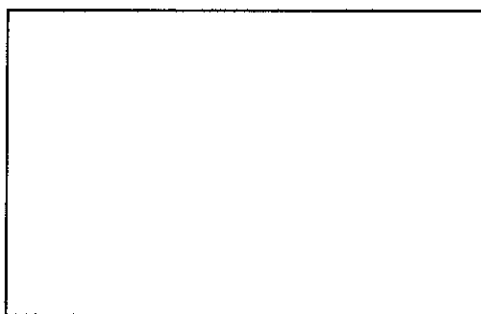
x	y
1	3
2	7
3	11
4	15
5	19
6	23
7	27



Graph Family _____ Best Fit Equation _____

B.

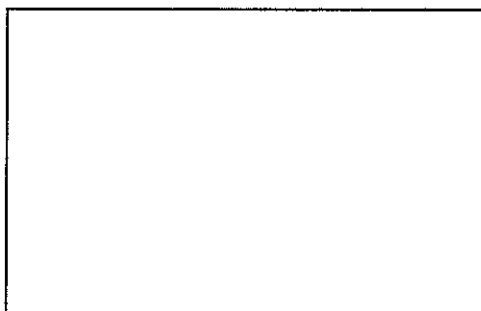
x	y
1	40
2	23
3	12
4	7
5	4
6	2
7	1



Graph Family _____ Best Fit Equation _____

C.

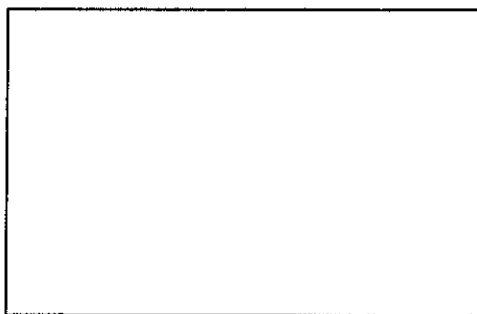
x	y
1	-4
2	-2
3	-1
4	0
5	0.8
6	1.3
7	1.5



Graph Family _____ Best Fit Equation _____

D. The loudness of spoken words vs. maximum distance at which it can be heard.

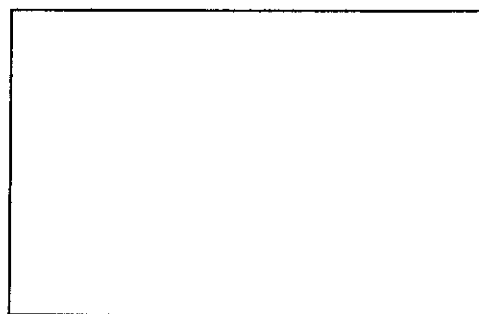
Loudness (dB)	Distance (m)
0.5	.1
3.2	16
5.3	20.4
16.8	30.5
35.8	37
84.2	44.5
120	47.6
170	50.6



Graph Family _____ Best Fit Equation _____

E. The number of Coho Salmon in Lake Michigan since their introduction in 1965

year	# years since 1965	population (thousands)
65		25
70		45
72		59
75		83
78		122
80		151
83		219
86		315
90		500



Graph Family _____ Best Fit Equation _____

Another Equation _____