

Appendix 7: Program: Prediction Interval

For this program to work, your data must be entered in L1 and L2.

Remember: Xlist: L1 Ylist: L2 (both in E:LinRegTTest... and STAT PLOT)

This program will calculate a prediction interval for a set of bivariate data.

	PROGRAM:PREDINT
	:ClrHome
	:Disp "PREDICTION"
	:Disp "INTERVAL FOR Y"
	:Disp "ENTER T CV"
	:Prompt T
	:Disp " "
	:Disp "ENTER X"
	:Prompt X
VARS	:1-Var Stats L1
5:Statistics...	:n N
XY	: \bar{x} M
1:n	: $\sum x^2$ Q
2: \bar{x}	: $\sum x$ Z
\square	:LinRegTTest L1,L2,Y1 ← STAT, TESTS, E:LinRegTTest
1: $\square x$:s S
2: $\square x^2$:a A
EQ	:b B
2:a	:A+BX Y
3:b	:(T*S* $\sqrt{1+N^{-1}+((N(X-M)^2/(N*Q-Z^2))}$) E
TEST	:ClrHome
0:s	:Output(2,1,"Y:")
	:Output(2,3,Y)
	:Output(3,1,"E:")
	:Output(3,4,E)
	:Y-E V
	:Y+E W
	:Output(4,1," ")
	:Output(5,5,V)
	:Output(6,2," Y POP")
	:Output(7,5,W)
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