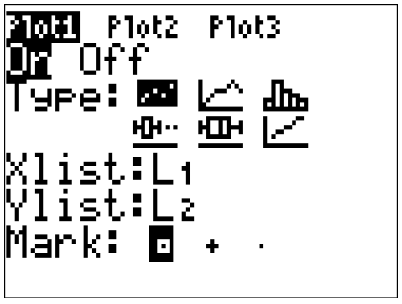
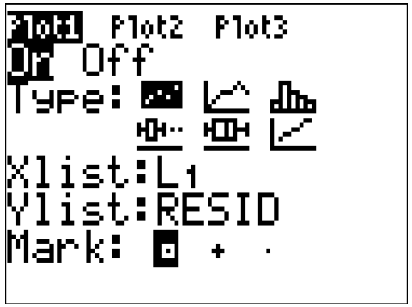
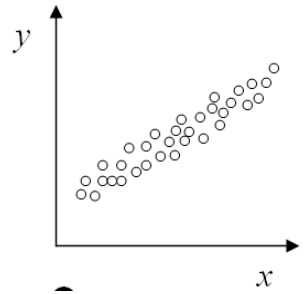
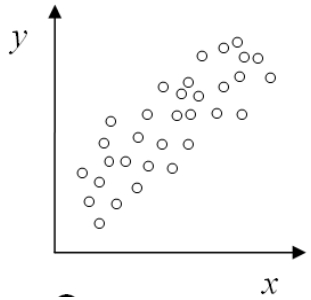
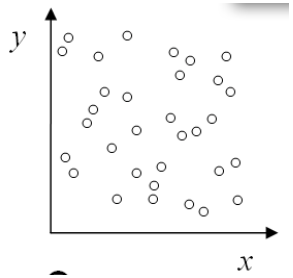
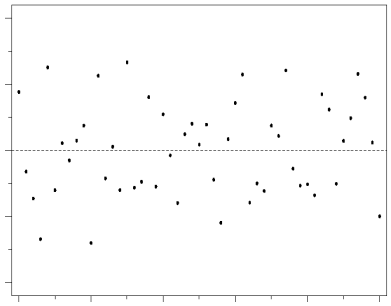
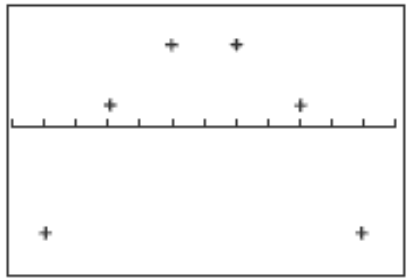
Data Analysis 3.1 Which type of graph holds bivariate data?	**Data Analysis 3.1** Scatterplot or Back-To-Back Stemplot	**Data Analysis 3.2** Response Variable	**Data Analysis 3.2** Y Values in scatterplot
Data Analysis 3.3 The line of best fit always passes through this point.	**Data Analysis 3.3** $(\overline{x}, \overline{y})$	**Data Analysis 3.4** Explanatory Variable	**Data Analysis 3.4** X values in scatterplot
Data Analysis 3.5 What is the correlation coefficient?	**Data Analysis 3.5** r	**Data Analysis 3.6** What is the coefficient of determination?	**Data Analysis 3.6** r^2
Data Analysis 3.7 Interpret r	**Data Analysis 3.7** There is a (weak/moderate/strong) (positive/negative) linear association between ____ and _____.	**Data Analysis 3.8** Interpret r^2	**Data Analysis 3.8** ___% of the variation in (response var) can be explained by the approximate linear relationship with (explanatory var)

Data Analysis 3.9 What would the value of r be for perfect correlation?	**Data Analysis 3.9** $r = \pm 1$	**Data Analysis 3.10** What would the value of r be for "no" correlation?	**Data Analysis 3.10** $r = 0$
Data Analysis 3.11 What are the ranges of r for weak correlation?	**Data Analysis 3.11** $.01 \le r \le .39$	**Data Analysis 3.12** What are the ranges of r for moderate correlation?	**Data Analysis 3.12** $.40 \le r \le .69$
Data Analysis 3.13 What are the ranges of r for strong correlation?	**Data Analysis 3.13** $.70 \le r \le .99$	**Data Analysis 3.14** This determines that your linear model is a good fit.	**Data Analysis 3.14** Residual plot shows randomly scattered residuals about the regression
Data Analysis 3.15 This determines that your linear model is NOT a good fit.	**Data Analysis 3.15** Residual plot shows a curved pattern.	**Data Analysis 3.16** What are influential points?	**Data Analysis 3.16** An extreme point in the x direction that strongly affects the slope of the line in a scatterplot.

Data Analysis 3.17 Making a prediction beyond the domain of our x-axis	**Data Analysis 3.17** Extrapolation	**Data Analysis 3.17** Names for the equation $\hat{y} = a + bx$	**Data Analysis 3.17** Linear Model ,Linear Equation, LSRL, Regression Line, Prediction Line, Line of Best Fit
Data Analysis 3.18 Interpret the y-intercept "a"	**Data Analysis 3.18** At an (explanatory var) value of 0 units, our model predicts a (response var) value of (y) units.	**Data Analysis 3.19** Interpret the slope "b"	**Data Analysis 3.19** For every 1 unit increase in the (explanatory var) our model predits an average increase of (y) units in the (response var).
Data Analysis 3.20 What is the meaning of least squares?	**Data Analysis 3.20** it minimizes the residual distance from the regression line	**Data Analysis 3.21** What are the calculator keys for regression on your calculator?	**Data Analysis 3.21** Stat,Calc, 8:LinReg(a+bx) L1,L2 Enter
Data Analysis 3.22 What are the calculator keys for displaying a scatterplot on your calculator?	**Data Analysis 3.22** 	**Data Analysis 3.23** What are the calculator keys for displaying a residual plot on your calculator?	**Data Analysis 3.23** 

Data Analysis 3.24 What must be done on your calculator before the list "RESID" is updated?	**Data Analysis 3.24** You must run the regression 8:LinReg(a+bx) L1,L2	**Data Analysis 3.25** Example of Strong Correlation	**Data Analysis 3.25** 
Data Analysis 3.26 Example of Moderate Correlation	**Data Analysis 3.26** 	**Data Analysis 3.27** Example of Weak Correlation	**Data Analysis 3.27** 
Data Analysis 3.28 Example of a residual plot that shows a good fit for its data	**Data Analysis 3.28** 	**Data Analysis 3.29** Example of a residual plot that shows that a different model may be more appropriate.	**Data Analysis 3.29** 
Data Analysis 3.30 Equation that involves correlation and slope?	**Data Analysis 3.30** $b = r\frac{s_y}{s_x}$	**Data Analysis 3.31** What is the difference between influential points and outliers?	**Data Analysis 3.31** Influential points are extreme in the x-direction(stronly affect slope) while outliers are extreme in the y-direction.