$\qquad$ Section 3.2: Least Square Regression Part 3

EQ:

- Residual Plots - $\qquad$ of the $\qquad$ agains $\dagger$
$\qquad$ value; assess how $\qquad$ a $\qquad$ fits
Association : ___ Evident
Association :____ Evident

Based on the given residual plot, determine if a linear association exists between the data. Justify your answer.
Ex. 1


Ex. 3


Ex. 5


Ex. 6


Although a linear model seems be appropriate, there appear to be too many $\qquad$ residuals, implying this line $\qquad$ the data.

Ex. 8


Although a linear model seems be appropriate, there appear to be too many $\qquad$ residuals, implying this line $\qquad$ the data.
> Use your graphing calculator to create a residual plot using NEA and FAT.

- To make sure the LAST regression equation your calculator found was for NEA vs FAT, recalculate the scatterplot and the LSRL for NEA vs FAT.
- RESID is the list of the LAST RESIDUALS your calculator created.
- Use ZOOM9. Compare to Residual Plot on p. 219. Sketch the residual plot.
* How well do you think the regression line fits this data?

* How comfortable are you using this linear model to make predictions?
$>$ Go back to WS "Calculating Regression Lines". Answer the question in Part III.

MUST HIT Points When Discussing Whether Linear Association is Appropriate:
1.
2.
3.
4.

* Know the Difference Between a Normal Probability Plot and a Residual Plot

> Assignment: p. 220-222 \#39, 40,42
p. 227-228 \#43, 44, 47, 48
p. 230-233 \#49-51, 53, 55

