

(b.) graph, zoom, ZOOMSTAT $\rightarrow$ graphed

(c.) relationship between variables
As age (x) increases, price (y) decreases

(d.) interpret the slope:

$$\text{slope} = -27.9$$

For each additional year, the price decreases 27.9
(27.9×100) = \$2,790

(e.) NOW, identify predictor variable (x) = age $\rightarrow$ (indep.)
response variable (y) = price $\rightarrow$ (dep.)

(f.) Any outliers? OR influential observ.?

No, None.

(g.) Predict the price of 2-yr old and 3-yr old Corvettes.

$$x=2$$

$$\hat{y} = 456.6 - 72.9(2) = 400.8 \times 100 = \$40,080$$

$$x=3$$

$$\hat{y} = 456.6 - 72.9(3) = 372.9 \times 100 = \$37,290$$

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x	1	3	4	5
y	13	-1	3	5

The residual is the amount of error in using the regression line ($\hat{y}$) to predict the actual y-value (y).

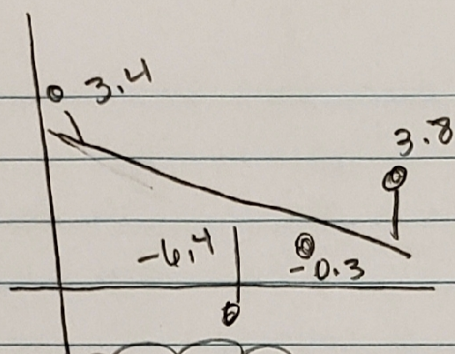
$$\text{Residual} = \text{error} = y - \hat{y}$$

[a.] Find & Gr
regression
and scatter

[a.] 1. put values in L₁ & L₂

2. STAT, TESTS, LinRegTTest

$$3. \hat{y} = 11.7 - 2$$



x	y	$\hat{y} = 11.7 - 2.1x$	
1	13	9.6	$11.7 - 2.1(1)$
3	-1	5.4	$11.7 - 2.1(3)$
4	3	3.3	" " " "
5	5	1.2	" " " "

Residual $y - \hat{y} = \text{error}$

$$13 - 9.6 = 3.4$$

$$-1 - 5.4 = -6.4$$

$$3 - 3.3 = -0.3$$

$$5 - 1.2 = 3.8$$

subtract to get

HOW CALCULATOR FINDS REGRESSION LINE OF "Least Squares"

$$\sum (y - \hat{y})^2 = \text{smallest value}$$