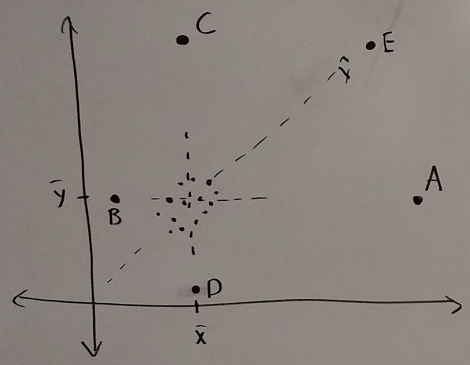
3-6 Notes

3-6 5.3 Outliers & Influence



Point	Slope	Y-int	Correlation
A	Decreases	Increase	Decreases
B	Decreases (not as much)	Inc.	Decreases
C	Same	Inc.	Decreases
D	Same	Dec	Decreases
E	Same	Same	Increase

$\hat{y} = a + bx$

$\text{slope}_b = \dfrac{\sum (x-\bar{x})(y-\bar{y})}{\sum (x-\bar{x})^2}$

$\text{y-int}_a = \bar{y} - b \cdot \bar{x}$

* Outliers in x direction are very influential on your regression.
(Distance from $\bar{x}$)
"Leverage"