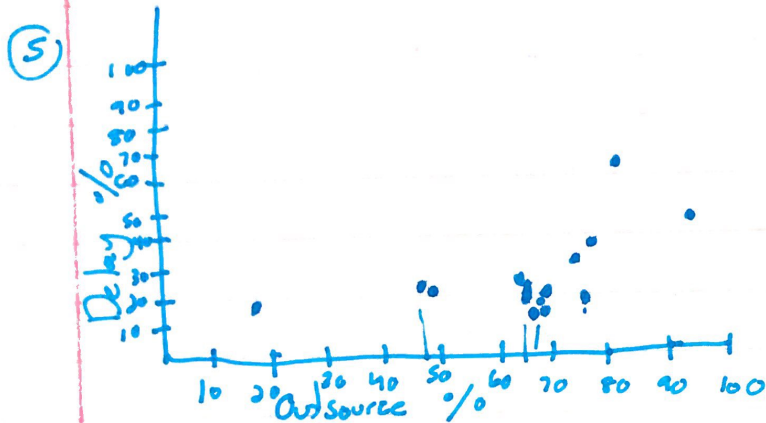


HW 3.1 Part A 1, 5, 7, 11, 13 pg 158-160

- ① Explanatory: water temperature  
Response: weight change (growth)  
Both are quantitative



- ⑦ a) Direction: Positive  
Form: somewhat curved  
Strength: moderately weak association

b) The outlier is Hawaiian Airlines (80, 70).  
Without the outlier of Hawaii, the relationship is a little more linear, but still not very strong.

⑧ a) Several southern states lie at the lower edges of their clusters. Students in the southern states don't do as well as their counterparts in other portions of the country.

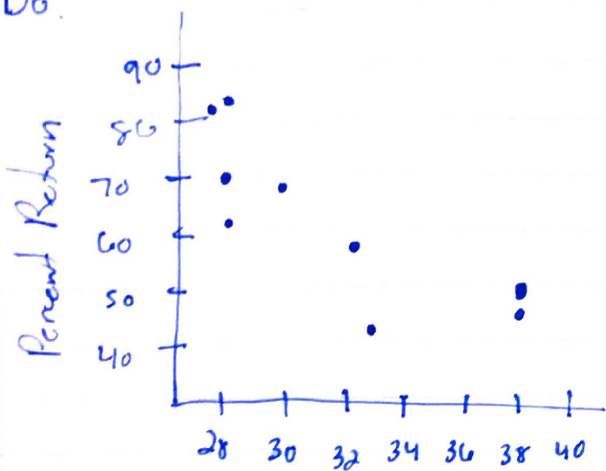
b) WV has a much lower mean SAT math score than other states with similar percents of students taking the exam.

4 Step Process: SPDC

(B) State: Is the relationship between the number of breeding pairs of merlins and the % of males who return next season negative?

Plan: Make Scatterplot, compute correlation if appropriate.

Do:



Breeding Pairs

Scatterplot shows expected negative association, though it is slightly curved. so it is reasonable to compute correlation ( $r = -0.7943$ ) as a measure of strength of the linear association.

Conclude: This supports the theory: a smaller % of birds survive following a successful breeding season.