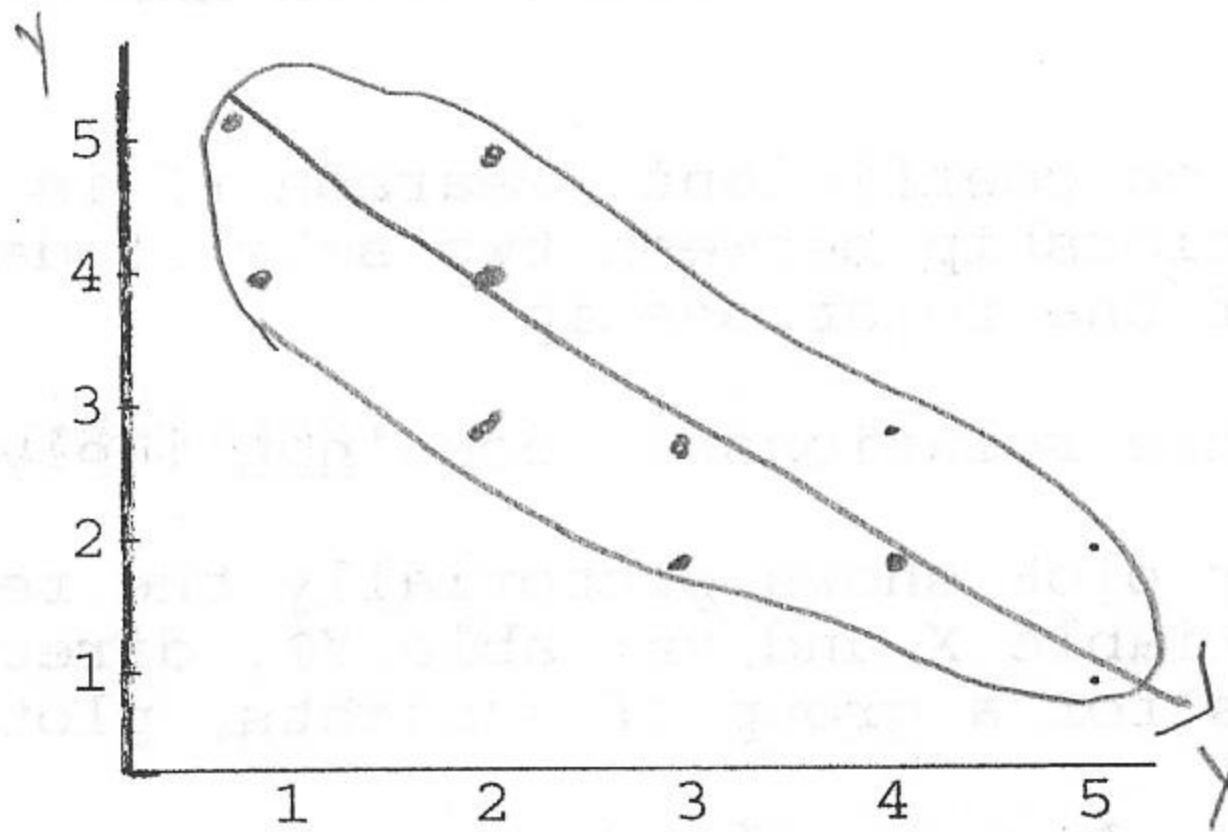


Due Thursday

Example B:

Predicted Grade (X)	Actual Grade (Y)
5	1
5	2
4	3
4	2
3	2
3	3
2	3
2	4
2	5
1	4
1	5

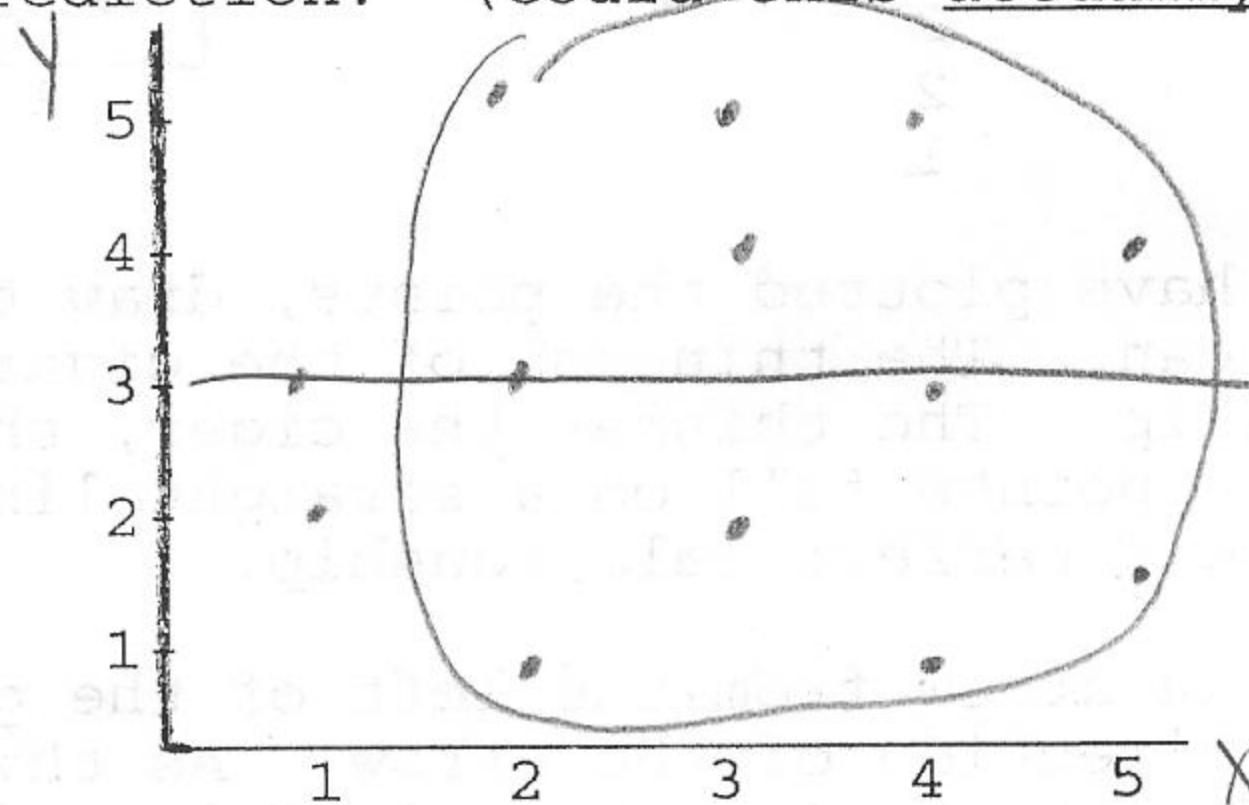


Once you have plotted the points (the first two pairs are plotted for you), draw the best cigar around the points that you can. Again, the thinness of the cigar indicates the degree of the relationship. The thinner the cigar, the stronger the relationship. If all the points fell on a straight line, you would have a very thin cigar, and in this case, a perfectly opposite relationship and a correlation coefficient (r) of -1.00 . But the cigar is not so thin, therefore the relationship is moderate.

Now draw an arrow from the left of the graph to the right, and note the direction of the arrow. As this one goes down, you have a negative relationship. The direction of the relationship is negative. This means that those who predicted high grades, got low grades; and those who predicted low grades, got high grades. Although this group was not perfect opposite in their (opposite) predictions, they were moderately successful in their opposite prediction. (Could this actually happen?)

Example C:

Predicted	Actual
5	4
5	2
4	1
3	5
3	4
3	2
2	5
2	3
2	1
1	2
1	3
4	3
4	5



Once you have plotted the points, draw the best cigar around the points that you can. In this case, the "cigar" is sort of round, unsmoke-able. The degree of the relationship in this case is zero (or close to it). You cannot determine the direction, and the r is close to 0. These students could not predict with any success their actual grades. Could this actually happen?

**Using the formula in the book for r , compute the r for each example.