Practice worksheet | Statistics and regression

Outliers and justified treatment

Name: _____ Date: _____

6 questions | 18 marks

1. For $(1, 2), (2, 4), (3, 6), (4, 8), (5, 20)$, calculate the fitted slope using all observations and compare with the first four. [3 marks]

Paired measurements

x	y
1	2
2	4
3	6
4	8
5	20

2. An unusually high score is confirmed as correct. Is this alone a reason to delete it? [3 marks]

3. An isolated point has a very large x-value but lies close to a regression line. Could it be influential? [3 marks]

4. Two reports use the same data, but one silently omits three low outcomes. State the problem. [3 marks]

5. An all-data model predicts 40 and the model without one point predicts 55 for the same x. What does this show? [3 marks]

6. Suggest a justified reason to exclude a correctly recorded point from a particular analysis. [3 marks]