Practice worksheet | Statistics and regression

Explanatory/response variables

Name: _____ Date: _____

6 questions | 18 marks

1. A sports analyst predicts sprint time using training hours. Name x and y with suitable units. [3 marks]

2. A model predicts electricity use from daily maximum temperature. Which measurement goes on the horizontal axis? [3 marks]

3. A table lists test score first and revision time second. Does this force test score to be x? [3 marks]

4. A company predicts the time to fill a tank using the flow rate. Identify the response and explain why a negative association may occur. [3 marks]

5. A scientist predicts adult mass from body length. Explain why reversing a fitted regression may require a new fit. [3 marks]

6. Give an observational study in which x is a useful predictor but cannot be claimed to cause y from the study alone. [3 marks]