Practice worksheet | Statistics and regression

Pearson correlation and coefficient of determination

Name: _____ Date: _____

6 questions | 18 marks

1. Given $S_{xx} = 16, S_{yy} = 25$ and $S_{xy} = 18$, calculate r and r^2. [3 marks]

2. A fit has $r = -0.75$. State its direction and percentage of response variation explained. [3 marks]

3. A student reports $r = 1.12$. Explain the problem. [3 marks]

4. A fitted model has $r^2 = 0.49$ and a negative slope. Find r. [3 marks]

5. If every x-value is converted from metres to centimetres, what happens to r? [3 marks]

6. All five response values are 7. Why is Pearson r undefined? [3 marks]