All questions worth 10 points except where noted.  
No work = No credit.

1. Estimate an equation for a line through a given set of data, and find the residual for one particular point.

2. Find the Linear Regression line for a set of data, given the formulas

\[ m = \frac{n \sum xy - \sum x \sum y}{n \sum (x^2) - (\sum x)^2} \]

and

\[ b = \frac{\sum y - m \sum x}{n}. \]

3. Understand the correlation coefficient, what it tells you about the fit of a line, its range and how it works.

4. For an ordered pair, be able to rotate, translate and reflect that point or provide a way to get from one to another.

5. Understand the meaning of the value of Pi, one way it originates and how to find it.

6. Determine roundoff error in estimating Pi instead of using the calculator value.