

1. Given $\hat{y} = 3 + 5x$ as an equation for a LSRL, calculate the residual for $y = 18$ at $x = 4$.

2. Calculate r , r^2 and the equation for the LSRL for:

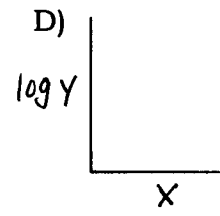
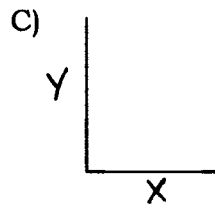
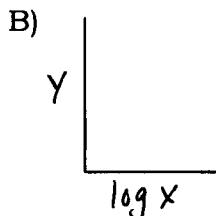
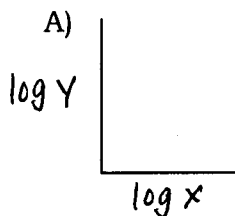
Quiz Average $X = \{90, 82, 97, 90, 85, 73, 98, 45, 79, 86\}$

Overall Average $Y = \{87, 80, 95, 70, 88, 72, 95, 52, 80, 82\}$

3. Given the data from problem 3, determine if there is a linear relationship. Justify your answer.

4. Given $r = .9867$, $r^2 = .9736$, and $y = .035 + .72x$, what percent of the change in y is caused by x ?

5. Which coordinate plane is used for exponential regression?



6. Given $\log y = -.058 + 2.36x$, solve for y .

7. Given the student population for a school district over the past few years, find the prediction equation for this data:

Year (x) = {1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996}

Population (y) = {1824, 2006, 2086, 2357, 3064, 3676, 4153, 4983}