

Part I:

1. E. All of the above statements are true.
2. B. y decreases by 3 when x increases by 4
3. E. All of the above statements are true.
4. A. least squares method
5. B. the observed values of the response variable y and the estimated values \hat{y}_i
6. C. 1.600
7. D. 9.76
8. E. All of the above statements are true.
9. C. 0.667
10. C. 0.970
11. A. The coefficient of determination, denoted by R^2 is interpreted as the proportion of observed y variation that cannot be explained by the simple linear regression model.
12. B. $\sqrt{SSE/(n-2)}$
13. D. either $t \geq 2.878$ or $t \leq -2.878$
14. B. .02