

$$1. (a) E = K - 1$$

$$K = \frac{H}{K-1}$$

$$F = \frac{K}{L}$$

$$F = N - K$$

$$G = N - 1$$

$$L = \frac{I}{N-K}$$

$$\text{Standard error} = \sqrt{MSE}$$

$$9.47 = \sqrt{L}$$

$$L = 89.6809$$

$$F = \frac{K}{L}$$

$$K = 89.6809 \times 3.477 \\ = 311.8205$$

$$R^2 = \frac{SS_{\text{reg}}}{SST}$$

$$\text{Standard error Coefficient} = 11.79 = M$$

$$SS_{\text{reg}} = \sum (\hat{y}_i - \bar{y})^2 = 936 = H$$

$$SS_{\text{residual}} = \sum (y_i - \hat{y}_i)^2 = 3230 = I$$

$$J = H + I = 936 + 3230 = 4166$$

$$311.821 = \frac{936}{K-1}$$

$$K = 4$$

$$E = 4 - 1 = 3$$

$$\frac{3230}{N-K} = 89.681$$

$$\frac{3230}{N-4} = 89.681$$

$$N = 40$$

$$F = 40 - 4 = 36$$

$$G = N - 1 = 40 - 1 = 39$$