The formulae used are given below:

- Let $y = mx + c$ be the line of best fit for the data $\{(x_i, y_i\}_{i=1}^{i=k}$. Then, we have,

$$m = \frac{k \cdot \sum_{i=1}^{i=k} y_i x_i - (\sum_{i=1}^{i=k} y_i)(\sum_{i=1}^{i=k} x_i)}{k \cdot \sum_{i=1}^{i=k} x_i^2 - (\sum_{i=1}^{i=k} x_i)^2} \approx 23.23$$

$$c = \frac{k \cdot (\sum_{i=1}^{i=k} y_i)(\sum_{i=1}^{i=k} x_i^2) - (\sum_{i=1}^{i=k} x_i)(\sum_{i=1}^{i=k} y_i x_i)}{k \cdot \sum_{i=1}^{i=k} x_i^2 - (\sum_{i=1}^{i=k} x_i)^2} \approx 22.58$$

- The exponent, $n$, was found by dividing the slope, $m$, by 10, i.e.,

$$n = m/10 = 2.323$$

  Note: Instead of dividing the slope by -10, here it is divided by 10, since the minus sign has alrea been absorbed in using the negative of RSSI values in the line's equation.

- For finding the variance, $\sigma^2$, with respect to the line of best fit, firstly, the mean, $\mu$, was found

$$\mu = \frac{\sum_{i=1}^{i=k}(y_i - mx_i - c)}{k}$$

  And then the following formula was used to find the variance,

$$\sigma^2 = \frac{\sum_{i=1}^{i=k}(y_i - mx_i - c - \mu)^2}{k} \approx 2.31$$

- For calculating the distance, the following formula was used,

$$d = d_0 \cdot 10^{(P_r - c)/m} = 10^{(P_r - c)/m}$$

  where $P_r$ is the negative value of reading of RSSI taken.