

**Question 3** (Essay Worth 10 points)

(06.07 HC)

A student is assessing the correlation between the number of hours a plant receives sunlight and the height to which it grows. The table below shows the data:

|                                        |   |   |    |    |    |    |    |    |    |    |
|----------------------------------------|---|---|----|----|----|----|----|----|----|----|
| <b>Number of hours of sunlight (x)</b> | 0 | 1 | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  |
| <b>Height of plant in cm (y)</b>       | 4 | 7 | 10 | 13 | 16 | 19 | 22 | 25 | 28 | 31 |

 Like 11k G+1 3k

**Part A:** Is there any correlation between the number of hours of sunlight that a plant receives and the height to which it grows? Justify your answer. (4 points)

**Part B:** Write a function which **best** fits the data. (3 points)

**Part C:** What does the slope and y-intercept of the plot indicate about the plant? (3 points)

