The Mulberry Bush*

Siew-Ling planted a small blueberry bush on her birthday and measured its height to be 16 cm. She measured the height of the bush again on the same day every month for 15 months, except for a month when the family was on vacation. Here are her results:

Month	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Height (cm)	16	18	19	19	24	28	31	34	35	44		64	74	77	101	105

Enter these data into your graphics calculator.

Examine a scatterplot and appropriate statistics to see how well these data fit a linear model.

Use a regression line to estimate the likely height of the blueberry bush in the month when the family was on vacation.

Estimate the likely height of the bush after two years of growth.

Look closely at your scatterplot. Examine some alternative models for the growth of the bush.

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*This context and the associated data have been reproduced, with permission, from Module 11 (Bivariate statistics), of the publication:

Kissane, B. (2015) *Learning Mathematics with Classwiz*. Tokyo, Japan: CASIO. (pp 142-145)

The entire publication can be freely downloaded from the CASIO Worldwide Education Website at:

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