**1A Exponential Models**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 3 | 5 | 6 | 8 | 9 | 11 |
|  | 1.04 | 1.49 | 1.79 | 2.58 | 3.1 | 4.46 |

1. The table above shows some data collected on the temperature, in °C, of a colony of bacteria (t), and its growth rate (g).

The data are coded using the changes of variable and . The regression line of on is found to be:

1. Mika says that the constant -0.2215 in the regression line means that the colony is shrinking when the temperature is 0°C. Explain why Mika is wrong.
2. Given that the data can be modelled by an equation of the form , where and are constants, find the values of and .