

SQA Past paper questions

2017 - Paper 2 - Question 8

Sequences may be generated by recurrence relations of the form

$$u_{n+1} = k u_n - 20, u_0 = 5 \text{ where } k \in \mathbb{R}.$$

(a) Show that $u_2 = 5k^2 - 20k - 20$. 2

(b) Determine the range of values of k for which $u_2 < u_0$. 4

Click [here](#) for video solution. 