

Higher Maths
SQA 2021 Paper 1
Question 13



A sequence is generated by the recurrence relation $u_{n+1} = \frac{2}{3}u_n + 8$, $u_7 = 20$.

(a) Determine the value of u_5 . 2

This sequence approaches a limit as $n \rightarrow \infty$.

(b) Determine the limit of this sequence. 2

Answers:

(a) 15

(b) 24