

## IB Algebra and Numbers Problem 009

An arithmetic sequence  $u_1, u_2, u_3, \dots$ , is such that  $d = 11$  and  $u_{27} = 263$ .

- A. Find  $u_1$ .
- B.
  - i. Given that  $u_n = 516$ , find the value of  $n$ .
  - ii For this value of  $n$ , find  $S_n$ .
  - .