9 **(a)** An arithmetic progression has twelve terms. The sum of the first three terms is -36 and the sum of the last three terms is 72. Find the first term and the common difference. [5]

(b) The first three terms of a geometric progression are 1, 1.2 and 1.44. Find the smallest value of n such that the sum of the first n terms is greater than 500. [5]