

- 10** (a) The first and last terms of an arithmetic progression are 12 and 48 respectively. The sum of the first four terms is 57. Find the number of terms in the progression. [4]
- (b) The third term of a geometric progression is four times the first term. The sum of the first six terms is  $k$  times the first term. Find the possible values of  $k$ . [4]