

- 9** **(a)** The first term of an arithmetic progression is -2222 and the common difference is 17 . Find the value of the first positive term. [3]
- (b)** The first term of a geometric progression is $\sqrt{3}$ and the second term is $2 \cos \theta$, where $0 < \theta < \pi$. Find the set of values of θ for which the progression is convergent. [5]