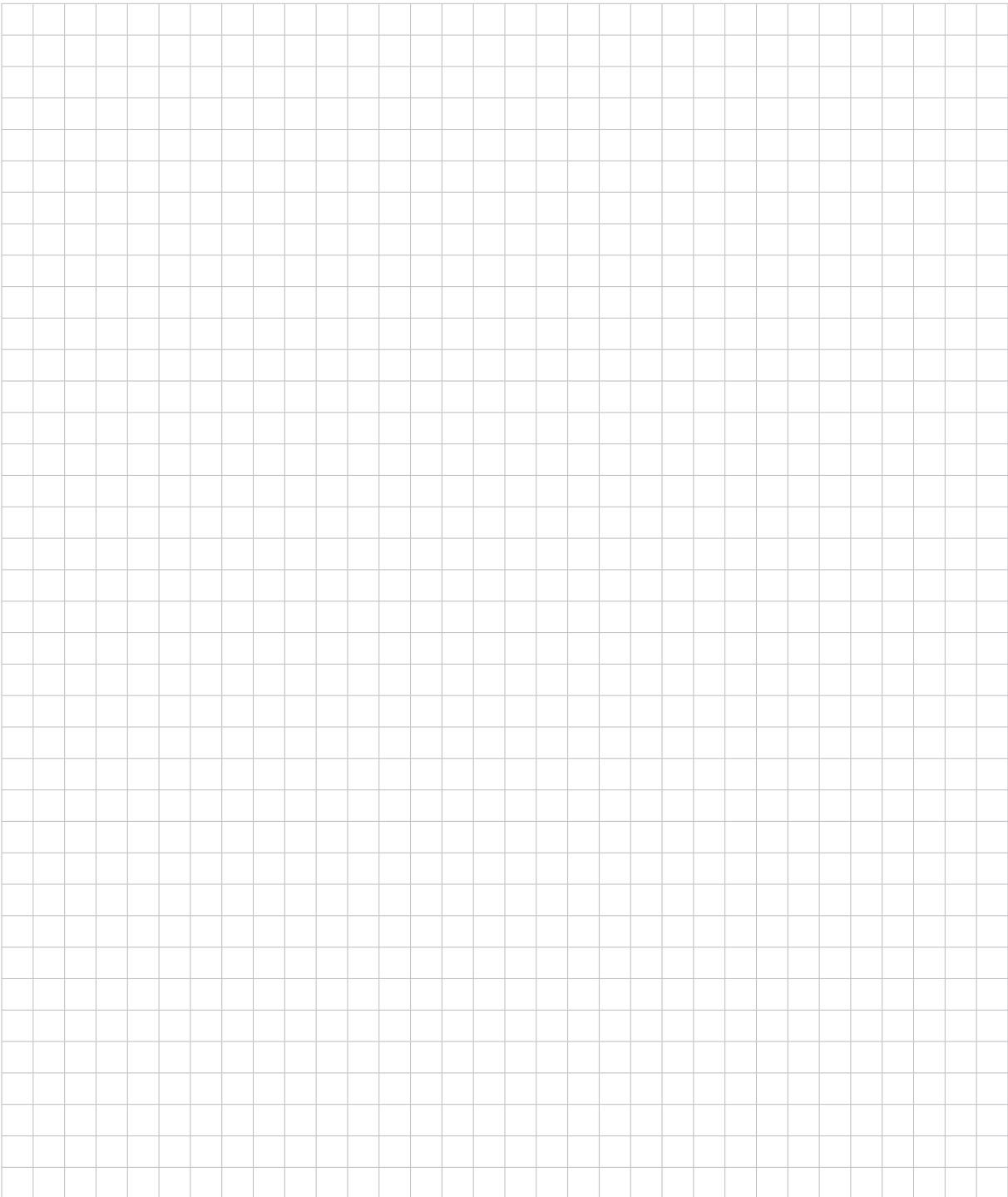


Question 8 (7 marks)

(a) Prove by mathematical induction that $10^n - 6^n$ is divisible by 4 for all positive integers n .



(5 marks)

