

Question 4

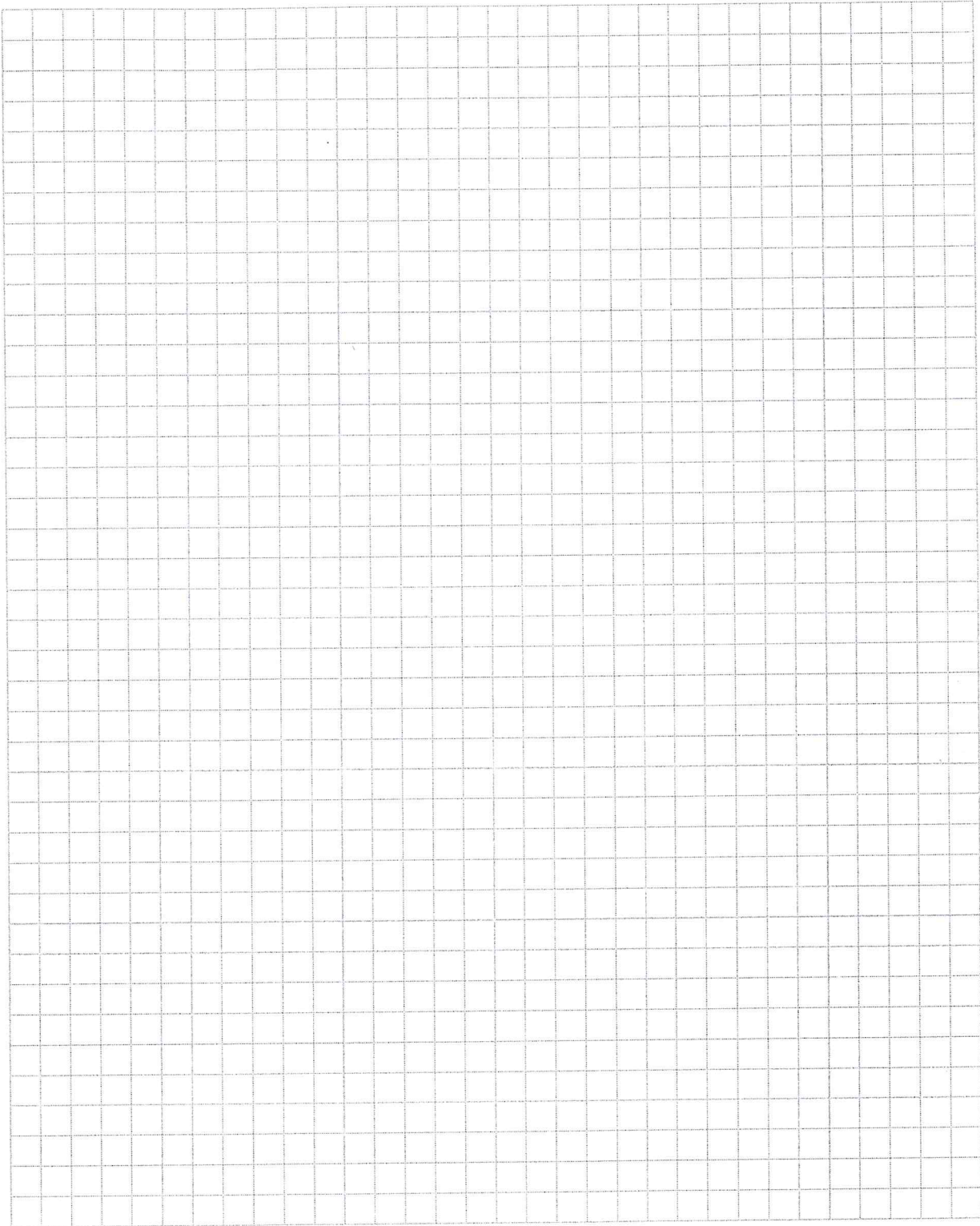
(25 marks)

(a) Niamh has saved to buy a car. She saved an equal amount at the beginning of each month in an account that earned an annual equivalent rate (AER) of 4%.

(i) Show that the rate of interest, compounded monthly, which is equivalent to an AER of 4% is 0.327%, correct to 3 decimal places.

(ii) Niamh has €15 000 in the account at the end of 36 months. How much has she saved each month, correct to the nearest euro?

- (b) Conall borrowed to buy a car. He borrowed €15 000 at a monthly interest rate of 0.866%. He made 36 equal monthly payments to repay the entire loan. How much, to the nearest euro, was each of his monthly payments?



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