Question 3 **(9 marks)**

From January 1, 2020, a company offered its employees an income package with a starting wage of $4000 per month, paid at the end of each month. Also, as an incentive to stay with the company, there was a monthly increase of $50 each month.

(a) Determine a recursive rule for the monthly wage. (2 marks)

(b) Deduce a simplified rule for the n^{th} term of the monthly wage. (2 marks)

(c) Determine the monthly wage for December 2020. (2 marks)

The company has decided to make the monthly increase $60 from the end of December 2023.

(d) Calculate the monthly wage for March 2024. (3 marks)