

Answer all ELEVEN questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

- 1** (a) Expand $\left(1 + \frac{x}{4}\right)^8$ in ascending powers of x up to and including the term in x^3

Give each coefficient in its simplest terms.

(3)

- (b) Use your expansion with a suitable value of x to obtain an approximation, to 4 decimal places, of $(1.035)^8$

(3)

(Total for Question 1 is 6 marks)



P 7 1 8 2 0 A 0 3 3 6