

DO NOT WRITE IN THIS AREA

Question 8 continued

Handwriting practice area with horizontal dotted lines.

(Total for Question 8 is 11 marks)



- 9 (a) Expand $\sqrt{1 - 4x}$ in ascending powers of x up to and including the term in x^3 , giving each coefficient as an integer. (3)
- (b) Use your expansion with a suitable value for x to obtain an estimate of $\sqrt{0.76}$. Give your answer correct to 4 decimal places. (3)
- (c) Hence find, to 3 decimal places, an estimate of $\sqrt{19}$ (2)

