

NAME:.....



Mathematics in Education and Industry

MEI STRUCTURED MATHEMATICS

METHODS FOR ADVANCED MATHEMATICS, C3

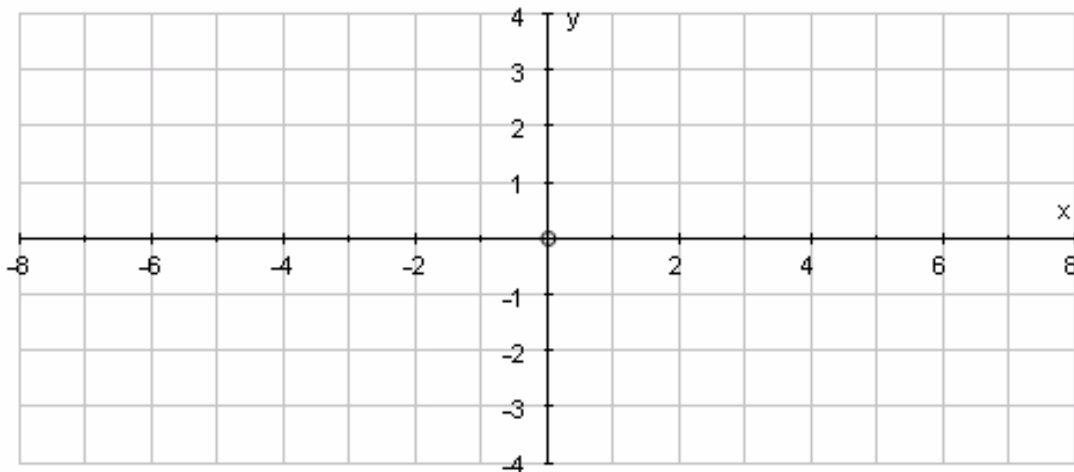
Practice Paper C3-C INSERT

INSTRUCTIONS

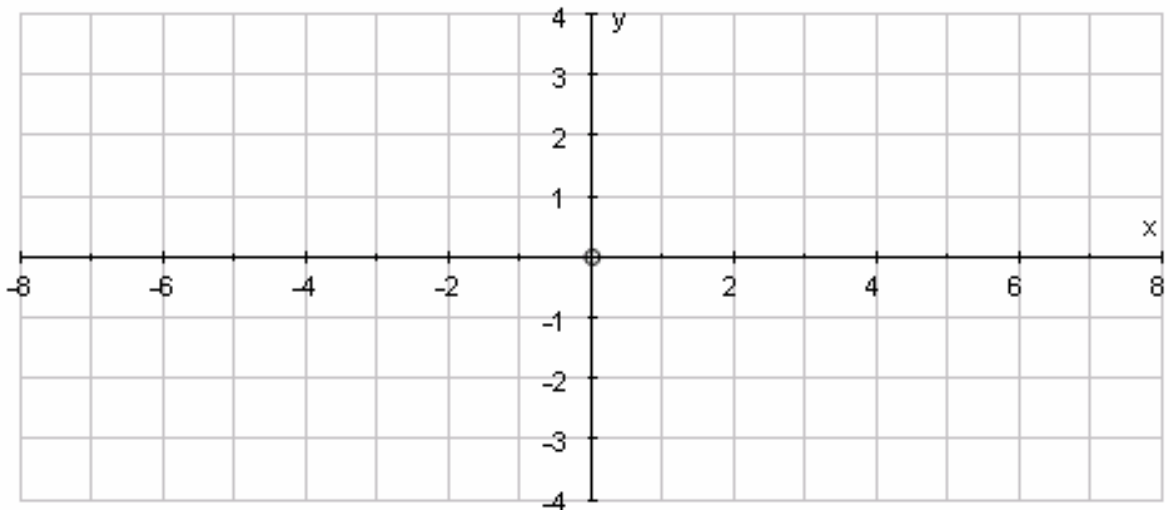
- This insert should be used for questions **3** and **9**.
- Write your name in the space at the top of this sheet.
- Attach this insert to the rest of your answers.

Insert for question 3.

(i) Sketch the graph of $y = 2f(x)$

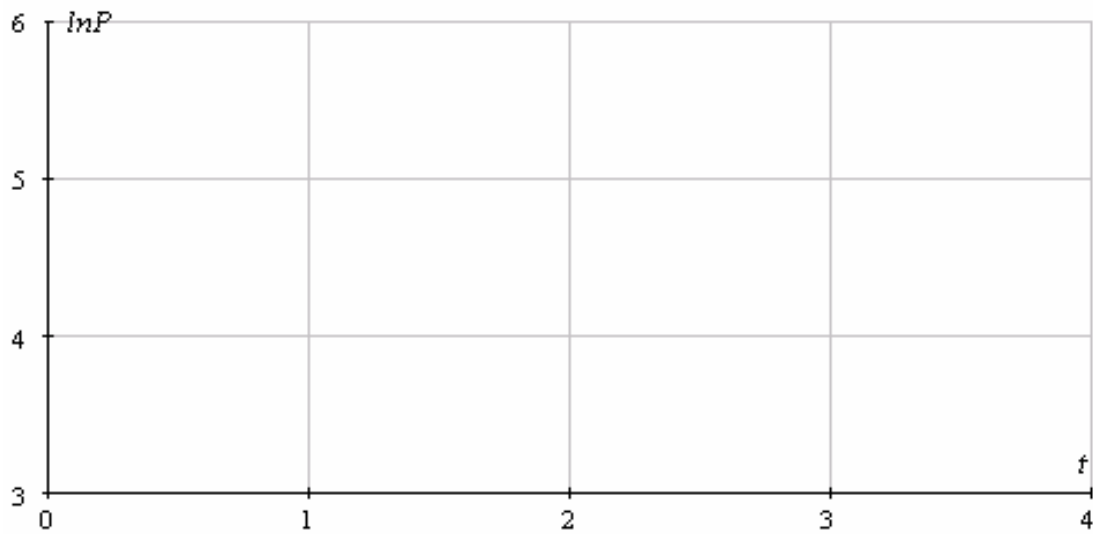


(ii) Sketch the graph of $y = f(2x)$.



Insert for question 9.

(ii) Plot $\ln P$ against t .



(iii) Plot the curves $P = P_0e^{kt}$ and $P = 150\arctan(t - 1) + 170$ for your values of P_0 and k . The data pairs are plotted on the graph.

