2009 Paper 4 Question 5

Computer Graphics and Image Processing

(a) Describe an algorithm that draws a Bézier cubic curve to a specified tolerance using straight lines. [7 marks]

(b) Describe an algorithm for clipping a line against a rectangle. [7 marks]

(c) A Bézier cubic curve could be clipped and drawn using the algorithm in part (a) to produce straight lines and the algorithm in part (b) to do the clipping. Describe a more efficient algorithm that draws a Bézier cubic curve clipped against a rectangle. [6 marks]