

1997 Paper 4 Question 10

Computer Graphics and Image Processing

Describe an algorithm to draw a straight line using only integer arithmetic. You may assume that the line is in the first octant, that the line starts and ends at integer coordinates, and that the function *setpixel*(x, y) turns on the pixel at location (x, y) . [13 marks]

Explain how straight lines can be used to draw Bezier cubic curves. [7 marks]