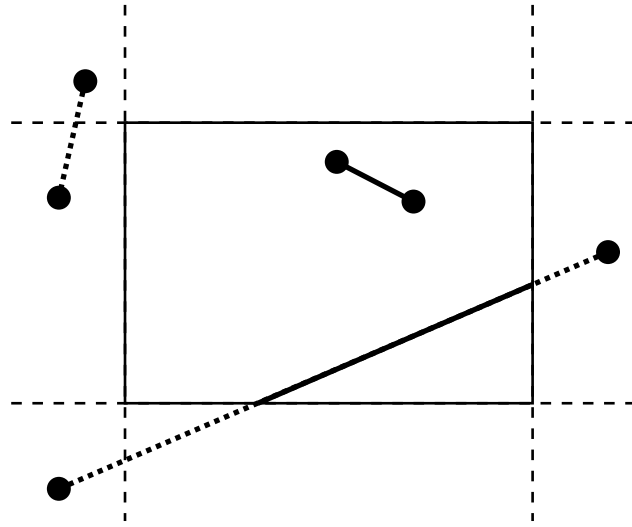


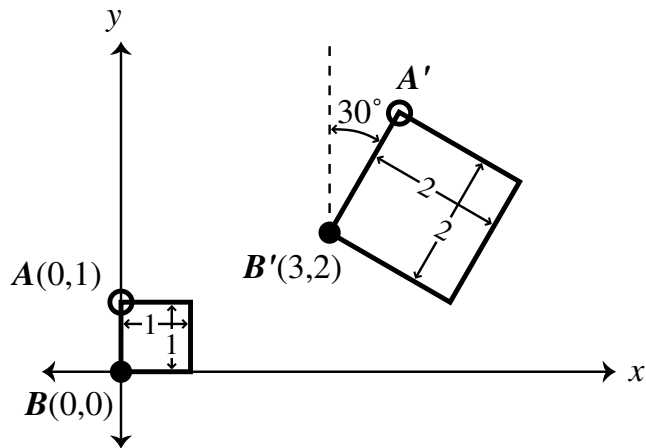
1998 Paper 5 Question 4

Computer Graphics and Image Processing



Describe an algorithm for clipping a line against a rectangle. [9 marks]

Show that it works using the above three examples. [3 marks]



The above diagram shows a complicated 2D transformation applied to a unit square. The overall transformation can be described in terms of a number of simpler transformations. Describe each of these simple transformations and give a matrix representation of each using homogeneous coordinates. [6 marks]

Use the matrices from the previous part to find the (x, y) coordinates of point A' , the image of point A under the overall transformation. [2 marks]