Cohen-Sutherland Algorithm

1. Given (-25,-25) and (25, 25) are the corners of the clip rectangle. The endpoints of a line are given as (28, 30) and (-30, -18). Using the Cohen-Sutherland line clipping algorithm, identify whether the lines are Accepted, Rejected, or Partial (partially accepted) only from the outcodes.

2. The top-right corner of a clipping rectangle is (25, 80). The window is 50 units wide and 40 units tall. The endpoints of a line segment are (10, 20) and (90, 85). Apply the Cohen-Sutherland Algorithm and identify whether the line is "partially inside", "completely inside", or "completely outside". If it is the first case, run the algorithm to calculate new endpoints for the line segment so that it is inside the clipping window.

3. A clipping window is 80 units wide and 40 units tall, and has its center at (0, 50). The endpoints of a line segment are (-90, 95) and (-100, 10). Apply the Cohen-Sutherland Algorithm and identify whether the line is "partially inside", "completely inside", or "completely outside".

4. A clipping window is defined by the corners (-40, 30) (bottom-left) and (40, 70) (top-right). The endpoints of a line segment are (-20, 55) and (30, 45). Apply the Cohen-Sutherland Algorithm and identify whether the line is "partially inside", "completely inside", or "completely outside".