**Clipping**

1. Line Clipping (Cohen-Sutherland)
2. Polygon Clipping

**Line Clipping:**

UDLR

(-1,-1)

(1,1)

0000

1000

1010

1001

0001

0010

0110

0100

0101

Example:

(1.2 , 0.5) <-> (-0.8, 2.3)

(-1,-1)

(1,1)

0000

1000

1010

1001

0001

0010

0110

0100

0101

. (1.2, 0.5)

U test y>1 => U=1

U = m.s.b (1-y) y>1

D = m.s.b (y+1) y<1

L = m.s.b (x+1) x<1 ?

R = m.s.b (1-x) x>1

Start: 0001

End: 1000

**Trivial Acceptance** is start and end are 0s.

True if all zeros; False if any is 1

**Trivial Rejection:** start \* end = 0\*1 0\*0 0\*0 0\*1

If 1s in the same place than True.Ex: 1000, 1000 = true

IF….

**Trivial Acceptance** **False: 1000**

**Trivial Rejection False: 0010**

Assing start to top as (1000) and end to the left as (0010)

**Equation of the Line Segment:**

**Slope of the line:** M = (y2-y1)/(x2-x1)

**A=B**

**A:** y-y1=m(x-x1) => y=mx+y1-mx1

**B:** y=mx+c