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**Kelas : D4 MI 2019A**

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**Mata Kuliah : Grafika Komputer**

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1. P = (1,1), Akhir Q = (10,10) xmin, ymin, xmax, ymax = 1, 1, 7, 7

Garis P (1,1)

L = Karena x < xmin atau 1 = 1 = 0

R = Karena x < xmax atau 1 < 7 = 0

B = Karena y < ymin atau 1 = 1 = 0

T = Karena y < ymax atau 1 < 7 = 0

Garis Q (10,10)

L = Karena x < xmin atau 10 > 1 = 0

R = Karena x < xmax atau 10 > 7 = 1

B = Karena y < ymin atau 10 > 1 = 0

T = Karena y < ymax atau 10 > 7 = 1

Jadi karena region kode kurva ujung garis pada (0000), maka perlu dipotong

Penentuan titik potong

M = P = (1,1) Q = (10,10)

= = 1 P = (1,1) adalah 0000

= 1 + 1 x (0 – 1)

Yp1 = 0 (titik potong)

Xp1 = x1 + = 1 + = 1

Titik potong adalah (1,1)

Region code Q (10,10) 1010

yp2 = y1 + M x (xmax – x1) = 10 + 1 ( 7 – 10) = 7

titik potong (7,7)

xp2 = x1 + = 10 + = 7

titik potong nya adalah ( 7, 7)

titik potong garis yaitu (1,0), (1,1), (7,7), (7,7)

viewport (1,1) dan (7,7)

1. P (1,1) Q (10,10)

X1 = 1 , xr = 7, yb = 1 dan yt = 7

**dx = x2 – x1**

= 10 – 1 = 9

P1 = -dx

= -9

P2 = dx

= 9

P3 = -dy

= -9

P4 = dy

= 9

**dy = y2 – y1**

= 10 – 1 = 9

Q1 = x1 – x2

= 1 – 1 = 0

Q2 =XR –X1

= 7 – 1

= 6

Q3 = y1 – yB

= 1 – 1 = 0

Q4 = yT – y1

= 7 – 1 = 6

Q1 / p1 = 0/-9

* Q2 / p2 = 6/9

= 2/3

* Q3 / p3 = 0/-9

= 0

* Q4 / p4 = 6/9

= 2/3

Untuk (pi < 0)T1 = (0,0,0) = 0

Untuk (pi < 0)T2 = (2/3, 2/3, 2/3,) = 2/3

T1 < T2

T1 = 0

X1 = x1 + dx x t1

= 1 + 9 x 0

= 1 + 0

X1 = 1

Y1 = y1 + dy x t1

= 1 + 9 x 0

= 1

* (x1, y1) = (1,1)

T2 =

X2 = x1 + dx x t2

= 1 + 3 x

= 1 + 6

X2 = 7

Y2 = y1 + dy x t2

= 1 + 9 x

Y2 = 7

(x2,y2) = (7,7)