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1.  $P = (1,1)$ , Akhir  $Q = (10,10)$   $x_{min}$ ,  $y_{min}$ ,  $x_{max}$ ,  $y_{max} = 1, 1, 7, 7$

Garis P (1,1)

L = Karena  $x < x_{min}$  atau  $1 = 1 = 0$

R = Karena  $x < x_{max}$  atau  $1 < 7 = 0$  (0000)

B = Karena  $y < y_{min}$  atau  $1 = 1 = 0$

T = Karena  $y < y_{max}$  atau  $1 < 7 = 0$

Garis Q (10,10)

L = Karena  $x < x_{min}$  atau  $10 > 1 = 0$

R = Karena  $x < x_{max}$  atau  $10 > 7 = 1$  (0101)

B = Karena  $y < y_{min}$  atau  $10 > 1 = 0$

T = Karena  $y < y_{max}$  atau  $10 > 7 = 1$

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

Penentuan titik potong

$$M = \frac{y_2 - y_1}{x_2 - x_1} \quad P = (1,1) \quad Q = (10,10)$$

$$= \frac{10 - 1}{10 - 1} = 1 \quad P = (1,1) \text{ adalah } 0000$$

$$= 1 + 1 \times (0 - 1)$$

$Y_{p1} = 0$  (titik potong)

$$X_{p1} = x_1 + \frac{y_{min} - y_1}{M} = 1 + \frac{1 - 1}{1} = 1$$

Titik potong adalah (1,1)

Region code Q (10,10) 1010

$$y_{p2} = y_1 + M \times (x_{max} - x_1) = 10 + 1 \times (7 - 10) = 7$$

titik potong (7,7)

$$x_{p2} = x_1 + \frac{y_{max} - y_1}{M} = 10 + \frac{7 - 10}{1} = 7$$

titik potong nya adalah ( 7, 7)

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

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

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

$x_1 = 1$ ,  $x_r = 7$ ,  $y_b = 1$  dan  $y_t = 7$

$$dx = x_2 - x_1$$

$$= 10 - 1 = 9$$

$$P_1 = -dx$$

$$= -9$$

$$P_2 = dx$$

$$= 9$$

$$P_3 = -dy$$

$$= -9$$

$$P_4 = dy$$

$$= 9$$

$$dy = y_2 - y_1$$

$$= 10 - 1 = 9$$

$$Q_1 = x_1 - x_2$$

$$= 1 - 1 = 0$$

$$Q_2 = x_r - x_1$$

$$= 7 - 1$$

$$= 6$$

$$Q_3 = y_1 - y_b$$

$$= 1 - 1 = 0$$

$$Q_4 = y_t - y_1$$

$$= 7 - 1 = 6$$

- $Q_1 / p_1 = 0 / -9 = 0$

- $Q_2 / p_2 = 6 / 9 = 2/3$

- $Q_3 / p_3 = 0 / -9 = 0$

- $Q_4 / p_4 = 6 / 9 = 2/3$

Untuk  $(p_i < 0) T_1 = (0, 0, 0) = 0$

Untuk  $(p_i < 0) T_2 = (2/3, 2/3, 2/3,) = 2/3$

$$T_1 < T_2$$

$$T_1 = 0$$

$$X_1 = x_1 + dx \times t_1$$

$$= 1 + 9 \times 0$$

$$= 1 + 0$$

$$X_1 = 1$$

$$Y_1 = y_1 + dy \times t_1$$

$$= 1 + 9 \times 0$$

$$= 1$$

- $(x_1, y_1) = (1, 1)$

$$T_2 = \frac{2}{3}$$

$$X_2 = x_1 + dx \times t_2$$

