Garis Biasa

a. (-5, 5) dan (1, 2)

$$\frac{x_2 - x_1}{x_2 - x_1} = \frac{2-5}{1+5} = \frac{-3}{6} = 1/2 = -0{,}5$$

x	Δx	x*	y	Δy	y*	[x]	[y]
-5	-	-5	5	-0,5	4,5	-5	5
-5	1	-4	4,5	-0,5	4	-4	5
-4	1	-3	4	-0,5	3,5	-3	4
-3	1	-2	3,5	-0,5	3	-2	4
-2	1	-1	3	-0,5	2,5	-1	3
-1	1	0	2,5	-0,5	2	0	3
0	1	1				1	2

b. (4, 3) dan (8, -2)

$$\frac{x_2 - x_1}{x_2 - x_1} \quad \frac{-2-3}{8-4} = \frac{-5}{4} = -1.1/2 = -1{,}25$$

x	Δx	x*	y	Δy	y*	[x]	[y]
4	-	4	3	-	3	4	3
7	1	5	3	-1,25	1,75	5	2
5	1	6	1,75	-1,25	0,5	6	1
6	1	7	0,5	-1,25	-0,75	7	-1
7	1	8	-0,75	-1,25	-2	8	-2

c. (2, 3) dan (5, 3)

$$\frac{x_2 - x_1}{x_2 - x_1} = \frac{3-3}{5-2} = \frac{0}{3} = 0$$

x	Δx	x*	y	Δy	y*
2	-	2	3	-	3
2	1	3	3	0	3
3	1	4	3	0	3
4	1	5	3	0	3

d. (2, 3) dan (2, 5)

$$\frac{x_2 - x_1}{x_2 - x_1} - \frac{5-3}{2-2} = \frac{2}{0}$$

$$= 0$$

x	Δx	x*	y	Δy	y*	[x]	[y]
2	-	2	3	-	3	2	3
2	0	2	3	1	4	2	4
2	0	2	4	1	5	2	5

e. (6,4) dan (2,1)

$\frac{x_2 - x_1}{x_2 - x_1} = \frac{1-4}{2-6} = \frac{3}{4} = -0,75$

x	Δx	x*	x	Δx	x**	[x]	[x]
6	-	6	4	-	4	6	4
6	-1	5	4	-0,75	3,25	5	3
5	-1	4	3,25	-0,75	2,5	4	3
4	-1	3	2,5	-0,75	1,75	3	2
3	-1	2	1,75	0,75	1	2	1

Garis DDA

a. (-5,5) dan (1,2)

$\Delta x = 1 - -5 = 6$

$\Delta y = 2 - 5 = -3$

$|\Delta x| = 6 \quad |\Delta y| = 3 \quad \therefore step = \Delta x = 6$

$x\ inc = 6/6 = 1$

$x\text{-}inc = -3/6 = -0,5$

k	x	y
0	-4	4,5
1	-3	4
3	-1	3
4	0	2,5
5	1	2

round x,y
(-5,5)
(-4,5)
(-3,4)
(-2,4)
(-1,3)
(0,3)
(1,2)

b. (4,3) dan (8,-2)

$\Delta x = 8 - 4 = 4$

$\Delta y = -2 - 3 = -5$

$|\Delta x| = 4 \quad |\Delta y| = 5 \quad \therefore step = |\Delta y| = 5$

$x\text{-}inc\ 4/5 = 0,8$

$y\text{-}inc = -5/5 = -1$

k	x	y
0	4,8	2
1	5,6	1
2	6,4	0
3	7,2	-1
4	8	-2

round x,y
(4,3)
(5,2)
(6,1)
(6,0)
(7,-1)
(8,-2)

c. (2,3) dan (5,3)

$\Delta x = 5-2 = 3$

$\Delta y = 3-3 = 0$

$|\Delta x| = 3 \quad |\Delta y| = 0 \therefore step = |\Delta x| = 3$

$x\_inc = 3/3 = 1$

$y\_in = 0/3 = 0$

k	x	y
0	3	3
1	4	3
2	5	3

round x, y

(2,3)
(3,3)
(4,3)
(5,3)

d. (2,3) dan (2,5)

$\Delta x = 2-2 = 0$

$\Delta y = 5-3 = 2 \therefore step\ |\Delta x| = 2$

$x\_inc \quad 0/2 = 0$

$x\_inc = 2/2 = 1$

k	x	y
0	2	4
1	2	5

round x, y

(2,3)
(2,4)
(2,5)

e. (6,4) dan (2,1)

$\Delta x = 2-6 = -4$

$\Delta y = 1-4 = -3$

$|\Delta x| = 4 \quad |\Delta y| = 3 \therefore step = |\Delta x| = 4$

$x\_inc = -4/4 = -1$

$x\_inc = -3/4 = -0{,}75$

k	x	y
0	6	3,25
1	5	2,5
2	4	1,75
3	3	1
4	2	

round x, y

(6,4)
(5,3)
(4,3)
(3,2)
(2,1)