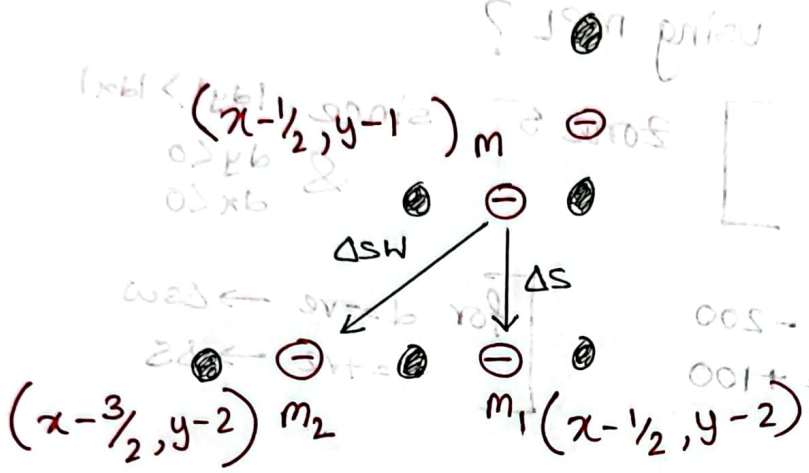
Zone 5

$\Delta S \rightarrow x = x$
$y = y - 1$

$\Delta SW \rightarrow x = x - 1$
$y = y - 1$



∅ ΔS

at m_1 $A(x-1/2) + B(y-2) + C = d_1$

at m $\leftarrow A(x-1/2) \pm B(y-1) \pm C \leftarrow d$

$0 \quad -B \quad +0 = \Delta S$

$\therefore \Delta S = dx$ ⟶ we'll use $[2dx]$

∅ ΔSW

at m_2 $A(x-3/2) + B(y-2) + C = d_2$

at m $\leftarrow A(x-1/2) \pm B(y-1) \pm C \leftarrow d$

$-A \quad -B \quad +0 = \Delta SW$

$\therefore \Delta SW = dx - dy$ ⟶ we'll use $[2(dx - dy)]$

∅ dinit

at m x_0, y_0 $A(x_0 - 1/2) + B(y_0 - 1) + C = dinit$

$-A/2 - B = dinit$

$\therefore dinit = dx - dy/2$ ⟶ we'll use $[2dx - dy]$

Q2) Draw (100,150) to (0,0) for 10 pixels using MPL?

dy = −150
dx = −100
] zone 5 since |dy| > |dx| & dy<0, dx<0

dinit = −50
ds = −200
dsw = +100

for d = −ve → Δsw
d = +ve → Δs

SL	x	y	d	Δs/Δsw	PIXEL
1	100	150	−50	Δsw	(100,150)
2	+99	+149	50	Δs	(99,149)
3	99	148	−150	Δsw	(99,148)
4	98	147	−50	Δsw	(98,147)
5	97	146	50	Δs	(97,146)
6	97	145	−150	Δsw	(97,145)
7	96	144	−50	Δsw	(96,144)
8	95	143	50	Δs	(95,143)
9	95	142	−150	Δsw	(95,142)
10	94	141	−50	Δsw	(94,141)

→ done