

1. $I = \int_{C_1} + \int_{C_2}$

$r_1 = \langle x, y \rangle = \langle t, 1 \rangle$

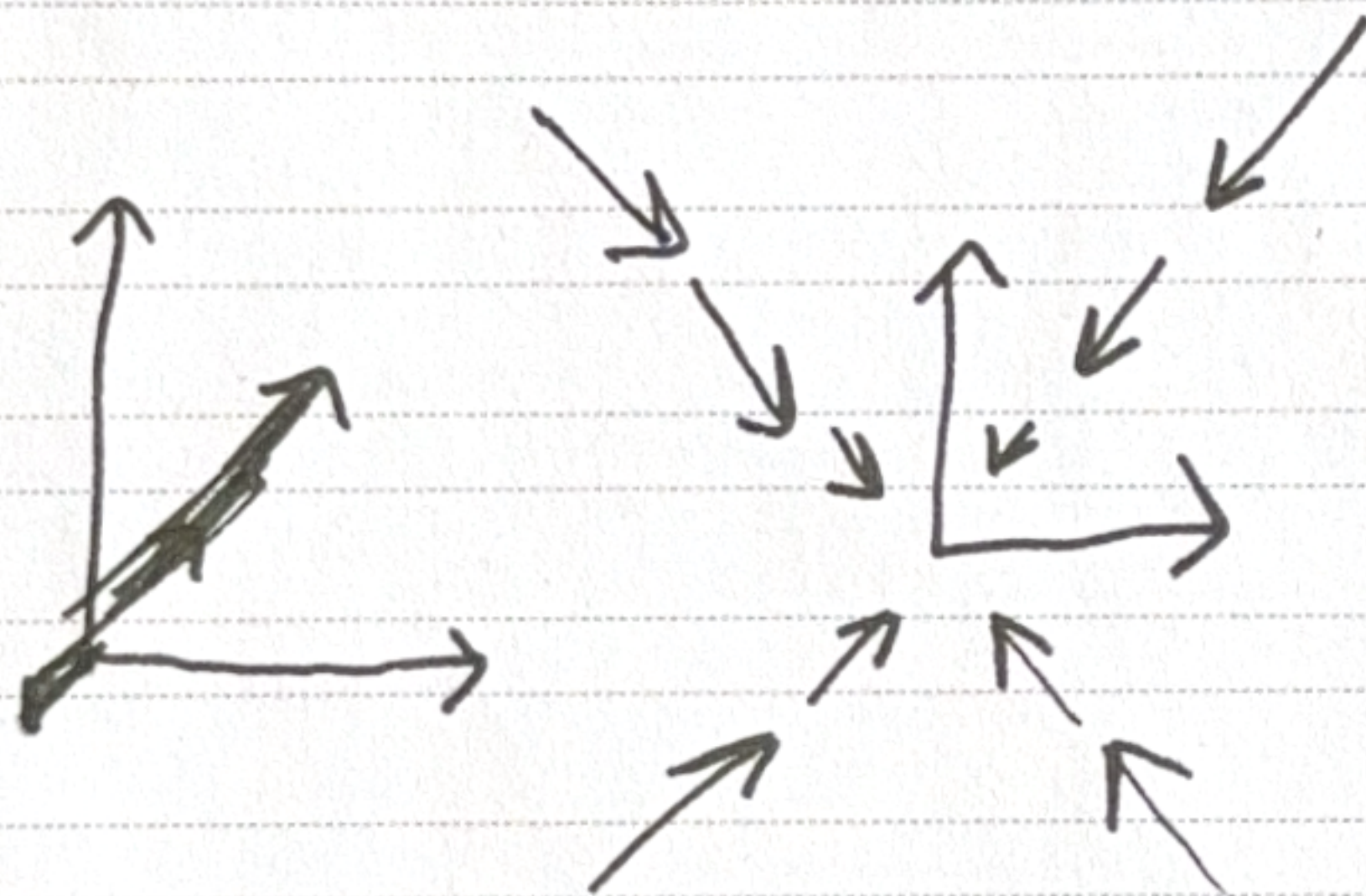
$\int_{C_1} = \int_0^1 1 \cdot dt = \left[t \right]_0^1 = \frac{1}{2} \cdot 1$

$r_2 = \langle 1, -y \rangle = \langle 1, -t \rangle$

$\int_{C_2} = \int_1^0 (1 - 2t) dt = \left[t - t^2 \right]_1^0 = 0 - \left(1 - \frac{1}{2} \right) = -\frac{1}{2}$

$I = 1 - 2 = -1$

2.



it's like a well.