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

$$r_1 = \langle x, 1 \rangle = \langle t, 1 \rangle$$
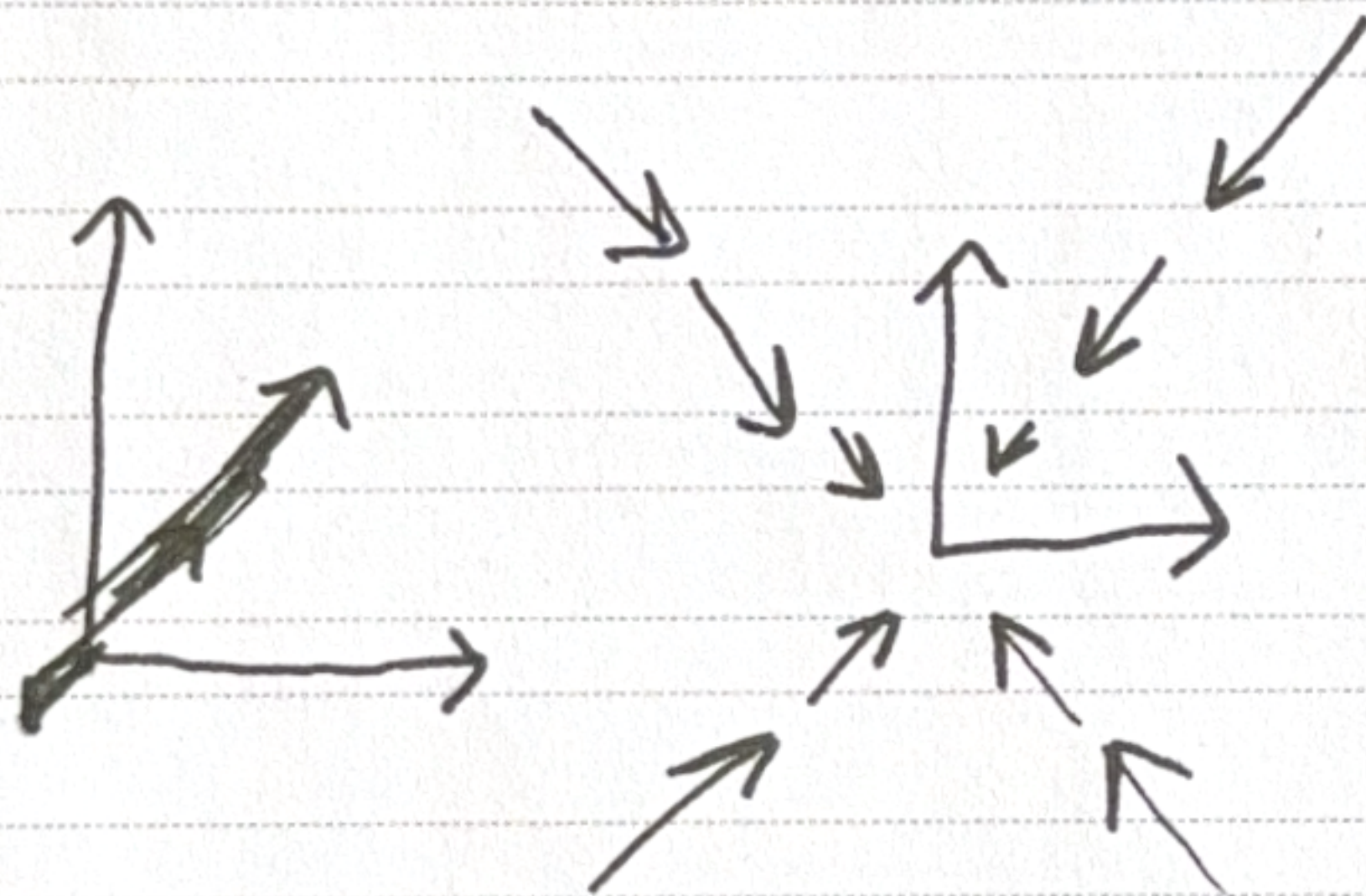
$$\int_{C_1} = \int_0^1 1 \,dt = \frac{1}{2}$$

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

$$\int_{C_2} = \int_1^0 1 - 2t \,dt = \frac{1}{2} - 2$$

$$\int = 1 - 2 = -1$$

2.

It's like a well.