

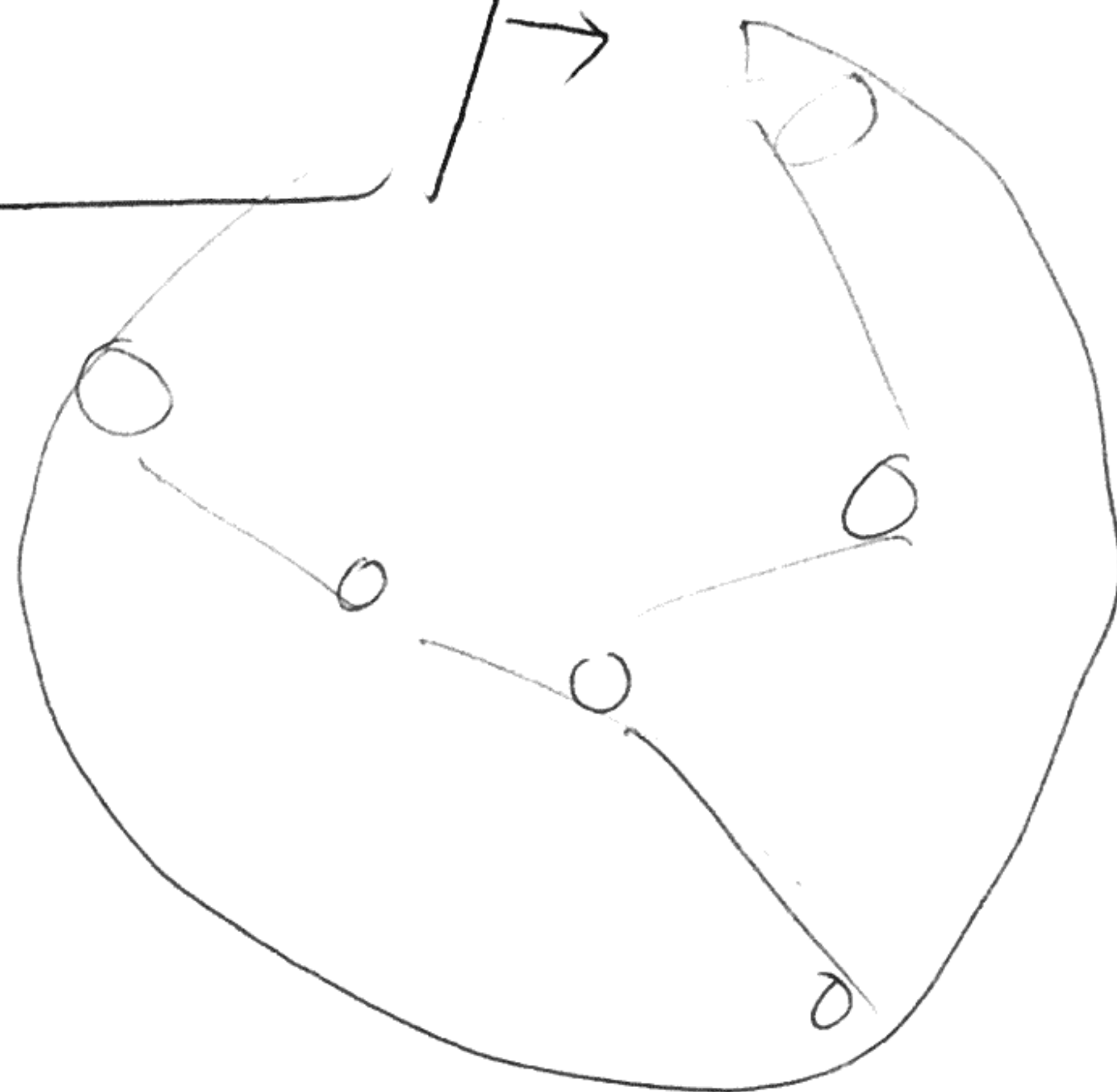
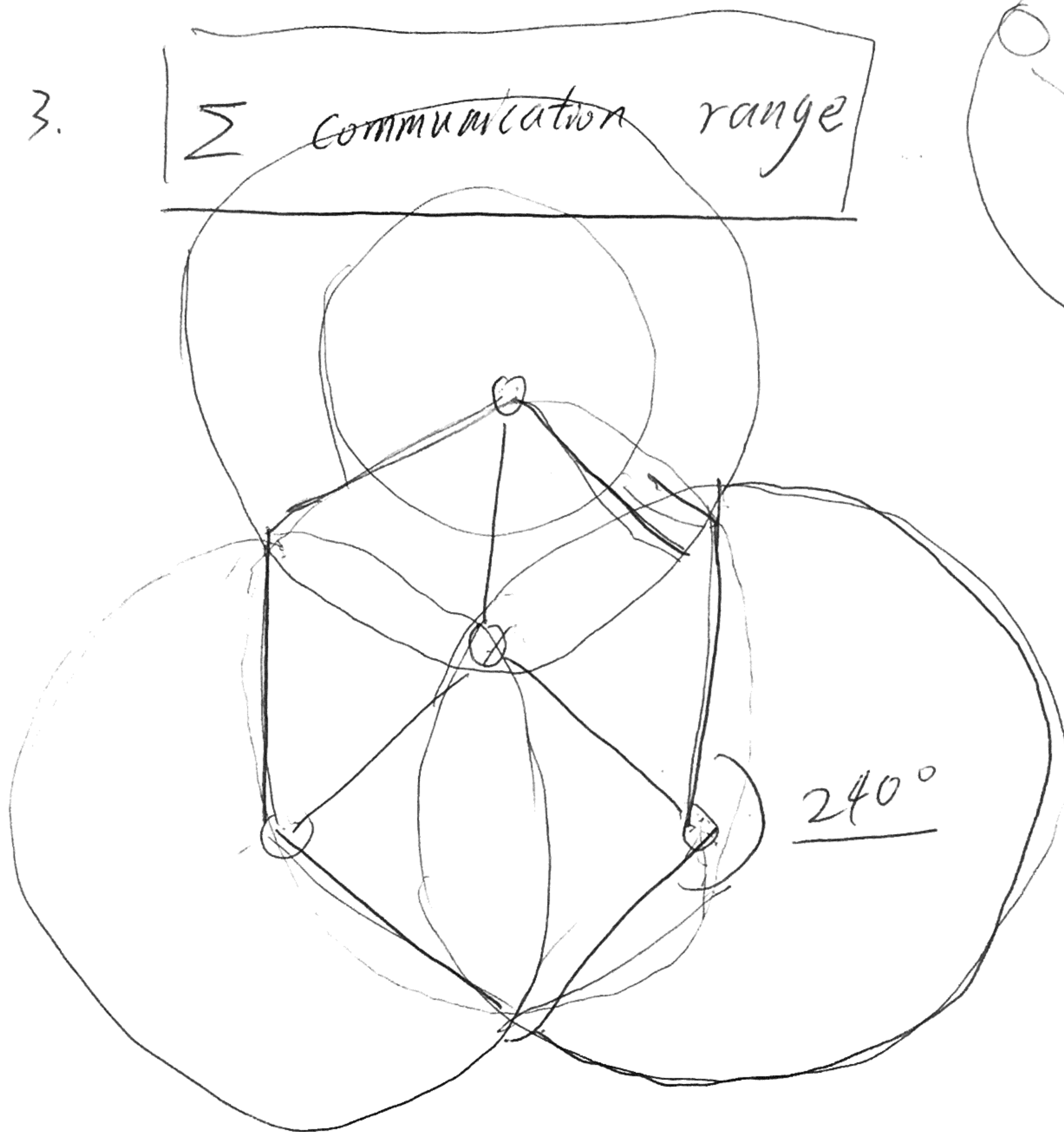
1. Algorithm \rightarrow pseudo

2. picture \rightarrow report

romba \rightarrow search \rightarrow

irobot

3. Σ communication range



240°

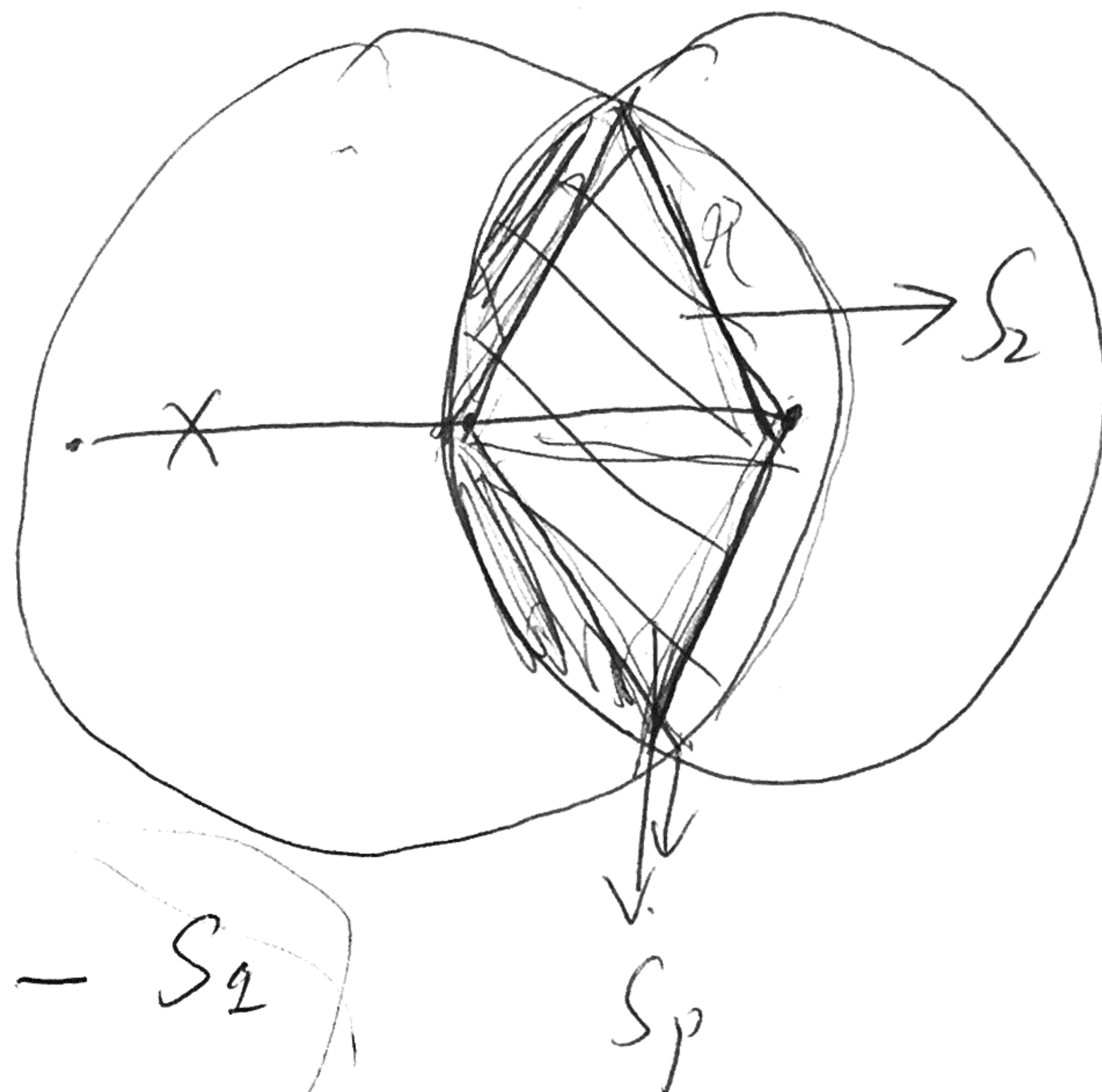
$$= \underline{\text{area_poly} + 3 * \text{area_sector}}$$

final position for each robot (2 sets of data)

minimal coverage sensors

case 1:

2 robots

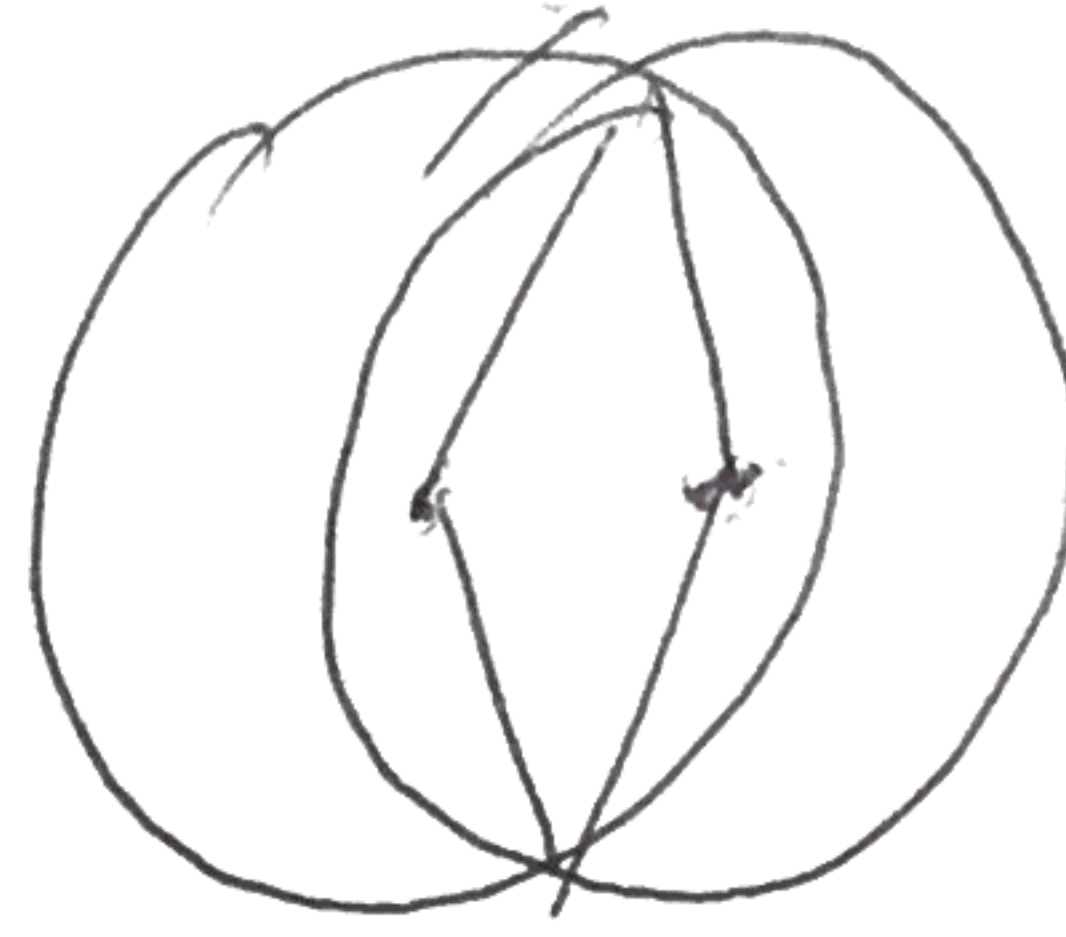
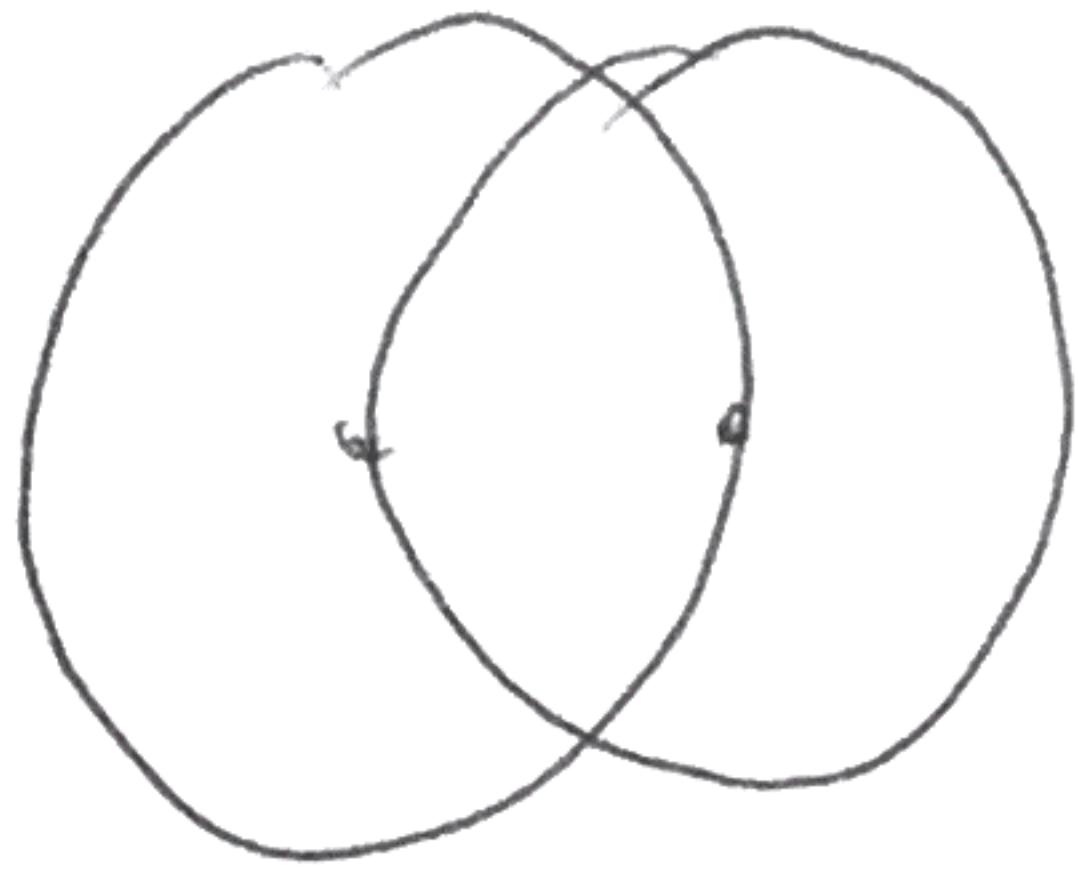


$$\underline{2\pi R^2 - S_1}$$

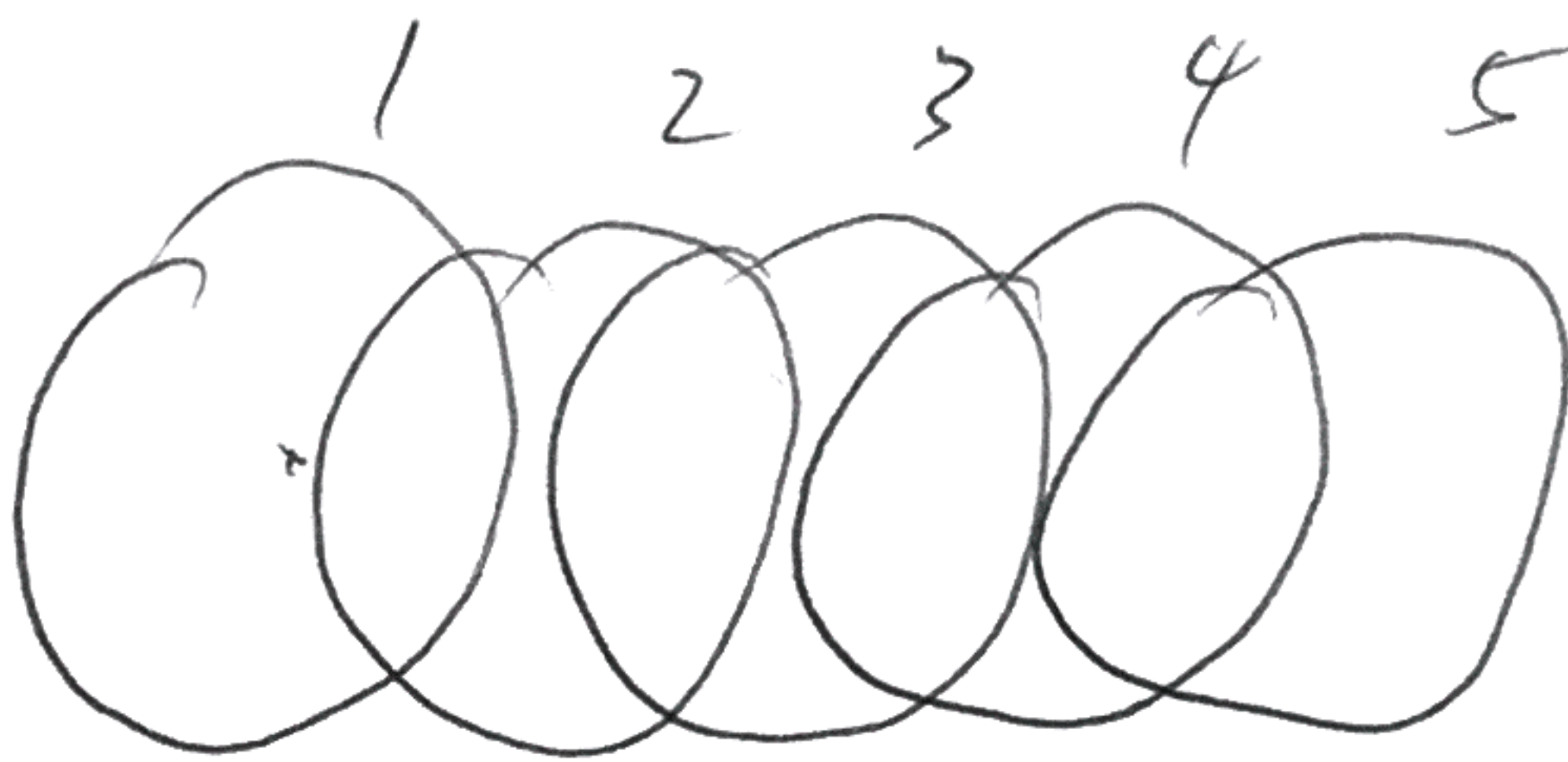
$$S_1 = (2S_2 - S_p)$$

↓ ↓ ↓
overlaped sector area of poly

case 2: use approximation



actual coverage



$$5 * \pi R^2 - \underline{14S_1}$$