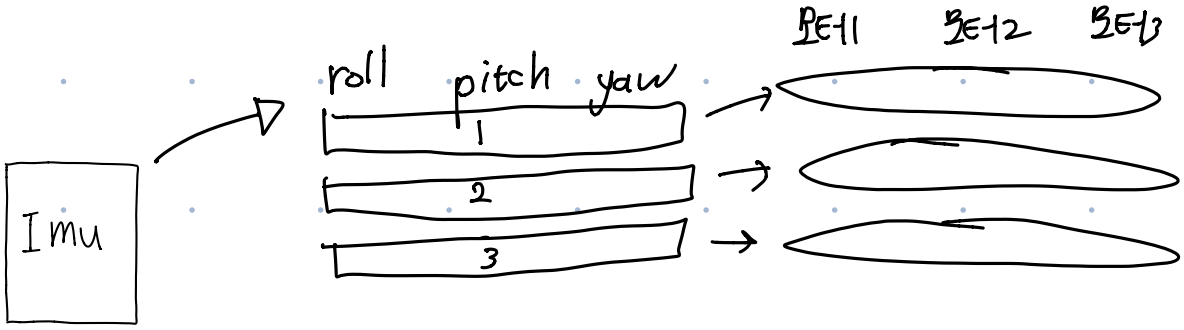
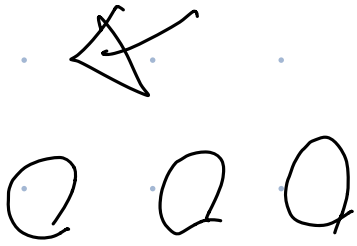
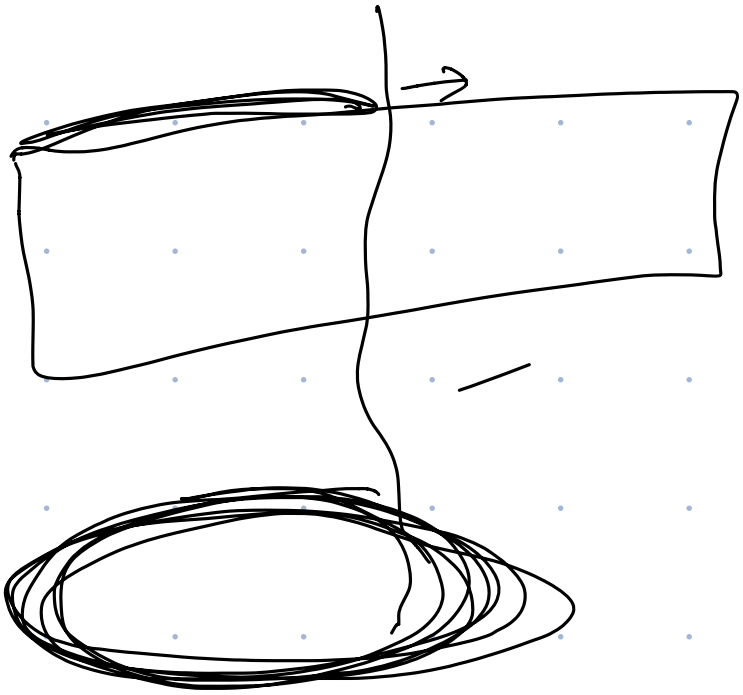


if [시리얼에서 읽은 값이 (0<roll<0)&(0<pitch<0)&(0<yaw<0)]

stepsperRevolution = □;

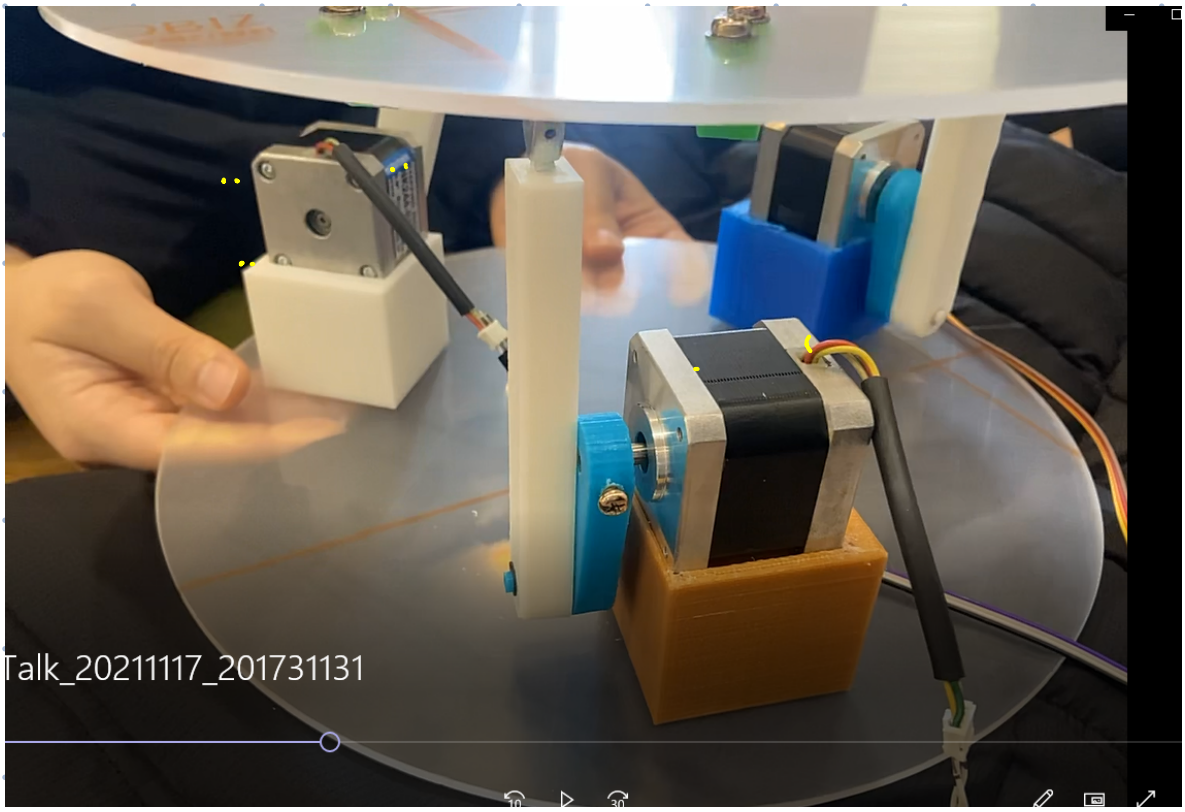
for

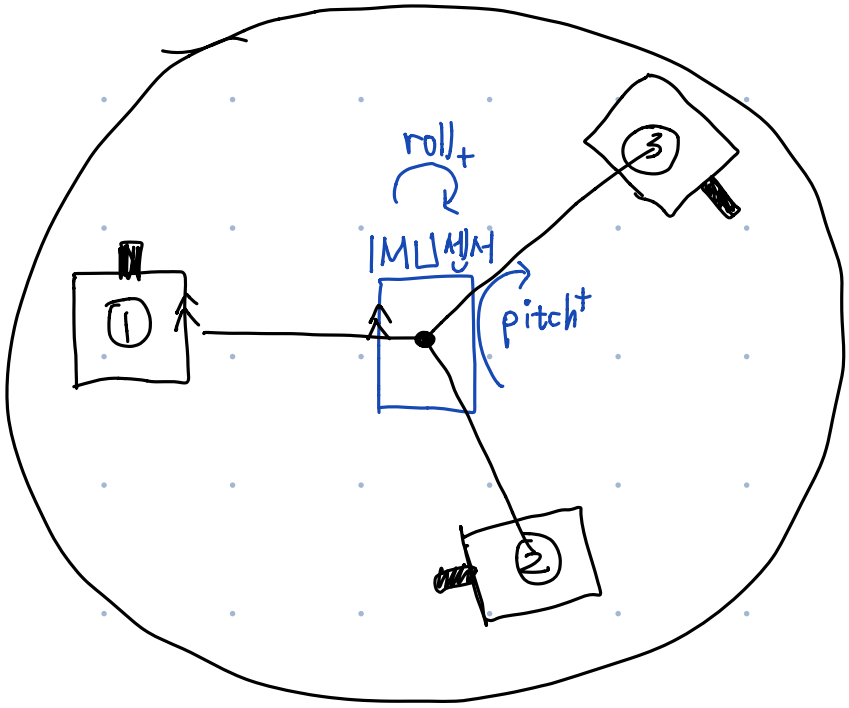


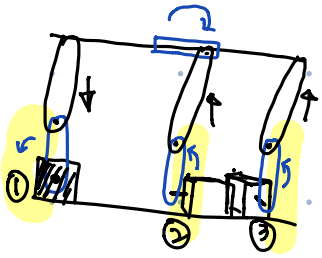


```
void loop(){
    Roll= 읽어들인roll 값;
    if ① < Roll < ②
```

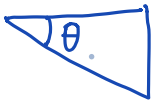
```
for (int x=0; x < [아주적게] ; x++)
  { 모터돌리기 }
```







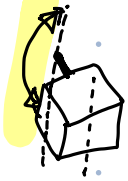
roll변화
pitch그대로.
yaw그대로



roll이 θ 만큼변화

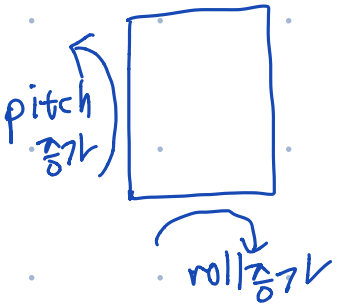
→ ① 낮추고, ② ③ 높이기

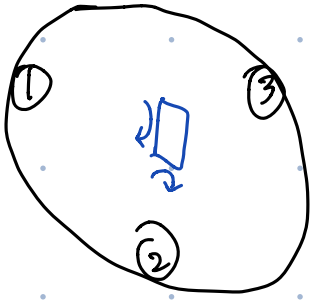
①:시계방향, ②③: 반시계방향



시계방향 → 낮추기

반시계방향 → 높이기.



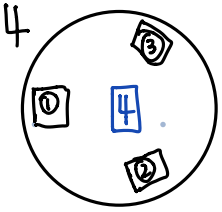


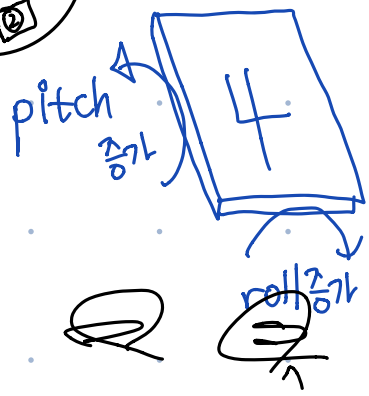
roll증가, pitch 감소

②높이기 , ①낮추기

②

4





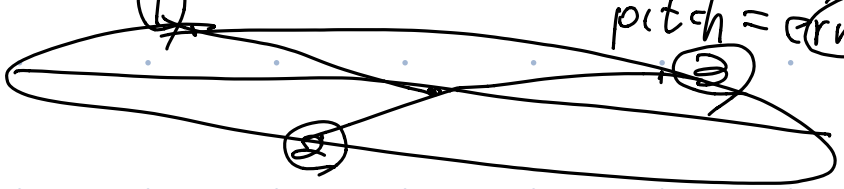
시계방향회전 : 낮추기 (cw) , 반시계방향회전 : 높이기 (ccw)

상황	roll	pitch	모터①	모터②	모터③
1	+	·	cw	ccw	ccw
2	·	+	ccw	cw	ccw
3	+	+	ccw	cw	ccw
4	+	−			
5	−	+			
6	−	−			

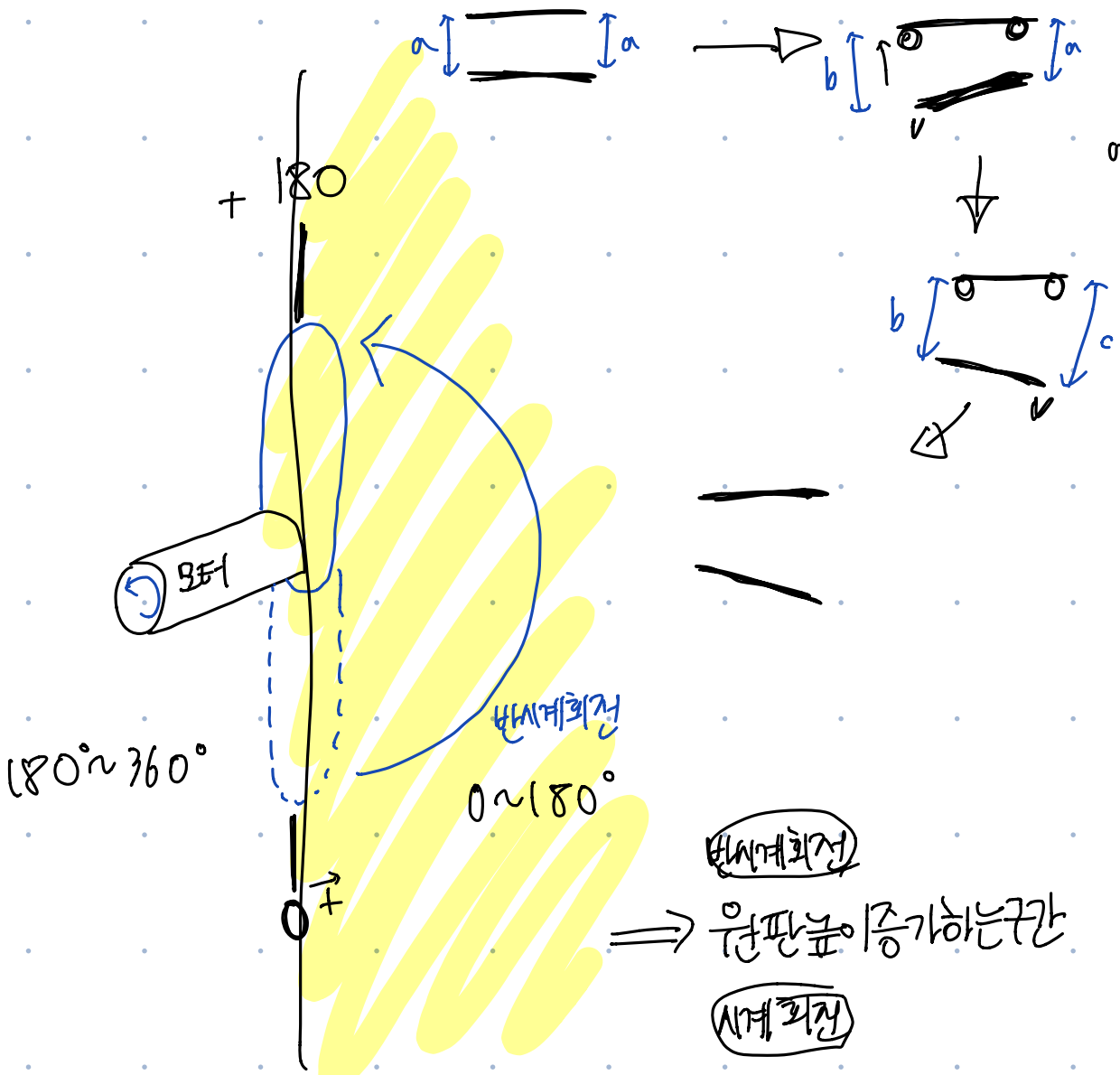
error = 0

roll = error 1

pitch = error 2



error =



어느 높이가 c 가되기 전까지는 기울어진 쪽을 높인다.

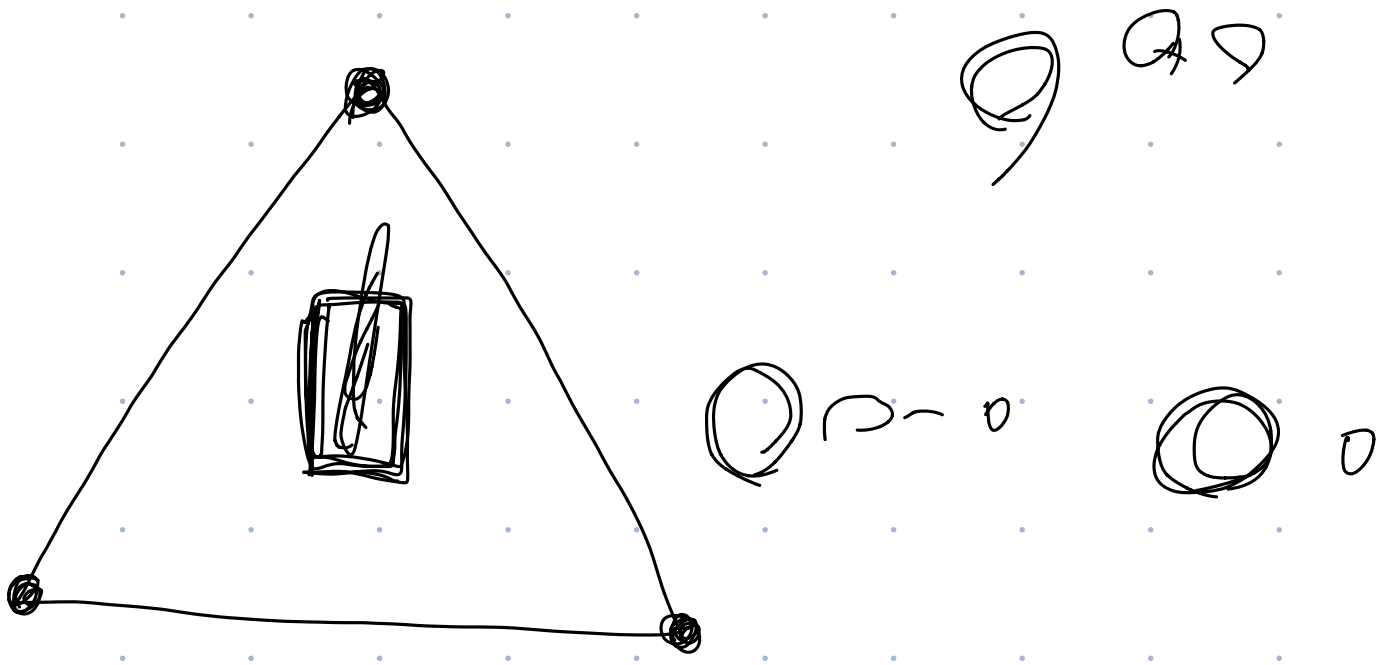
근데 길이가 대도달하면 기울어진

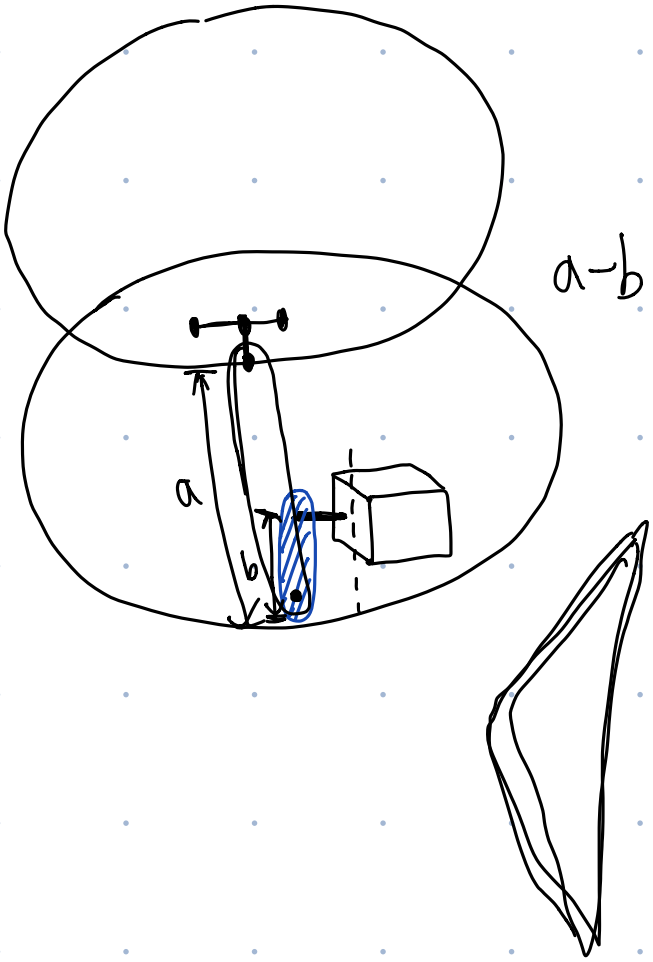
반시계회전

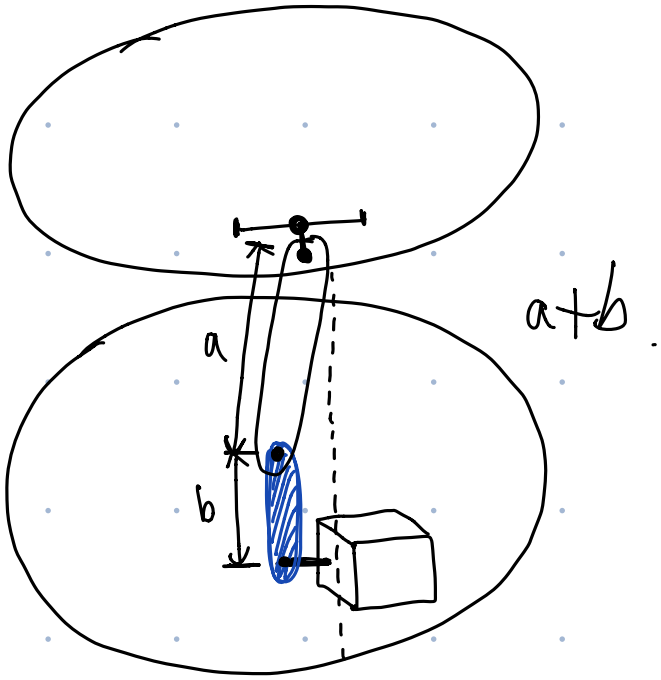
⟹ 원판높이 증가하는구간

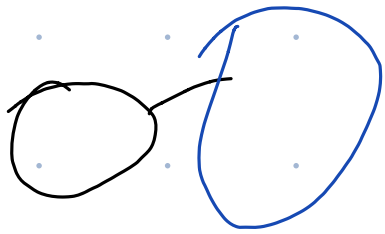
시계회전

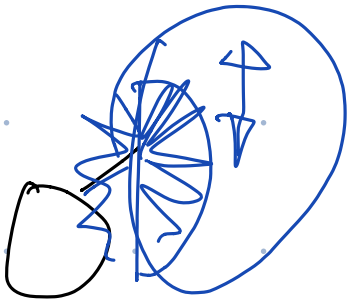
원판높이 감소

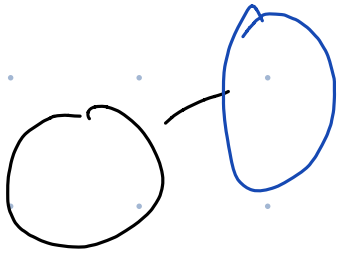


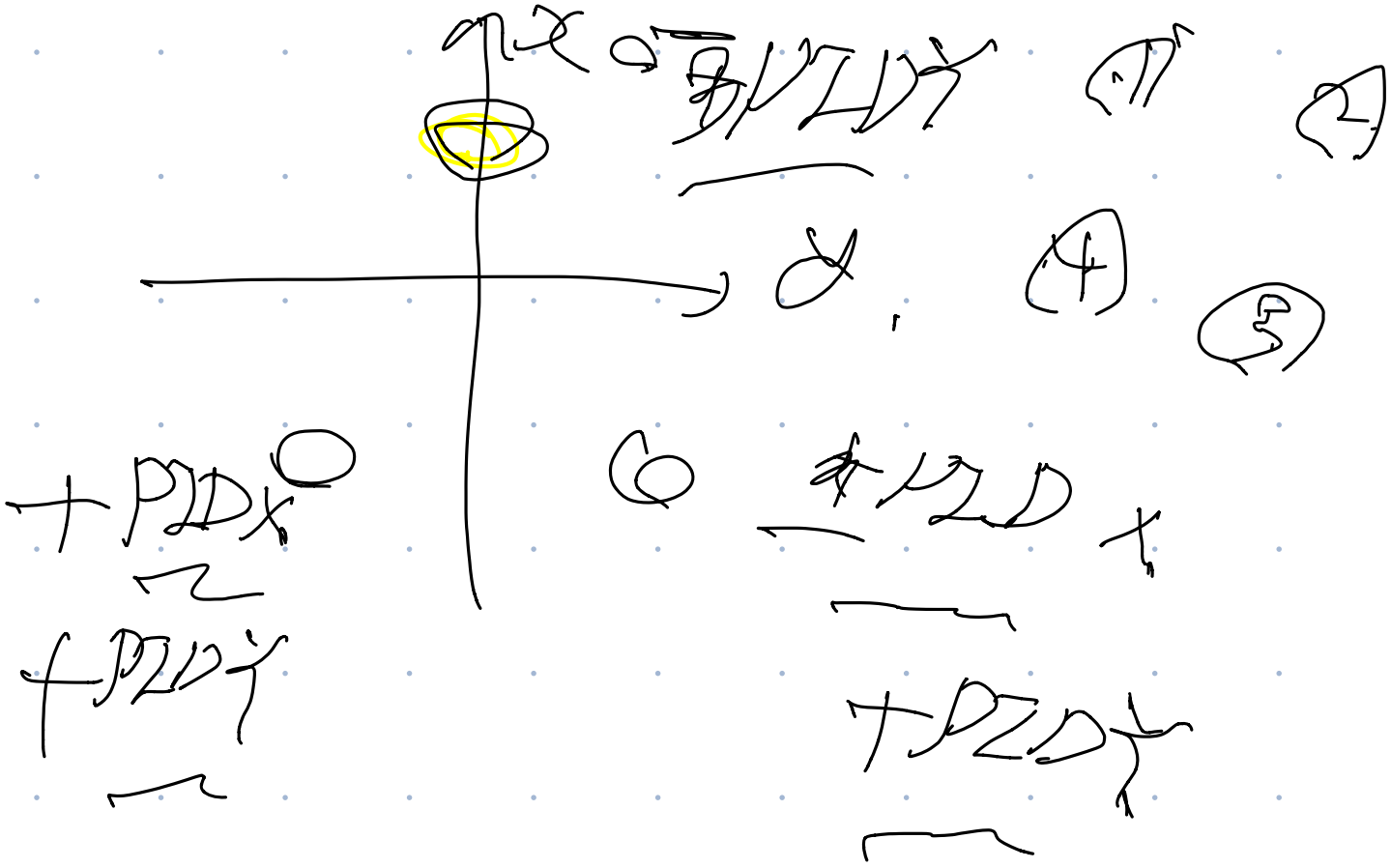

a-b
a
b

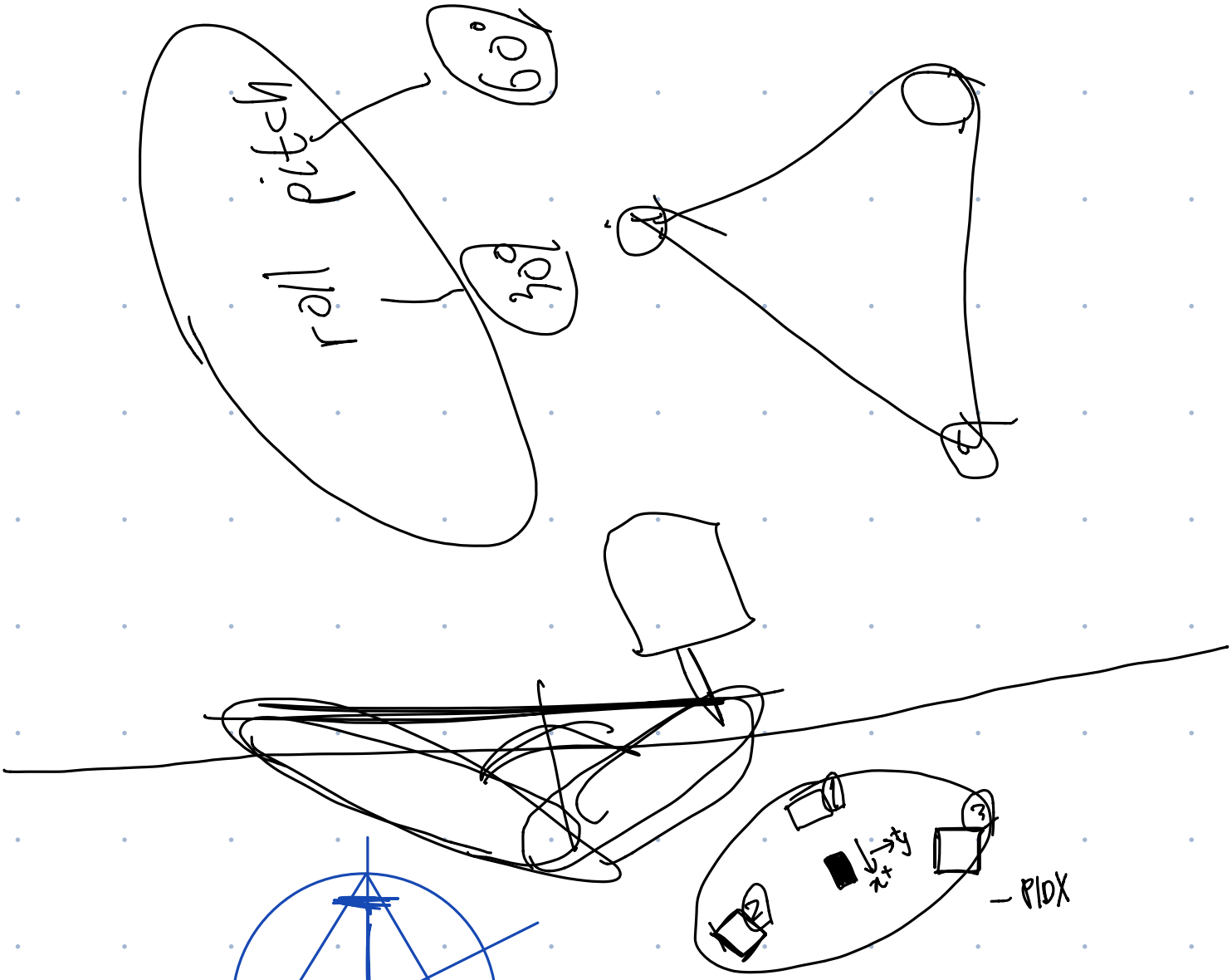

a+b
a
b

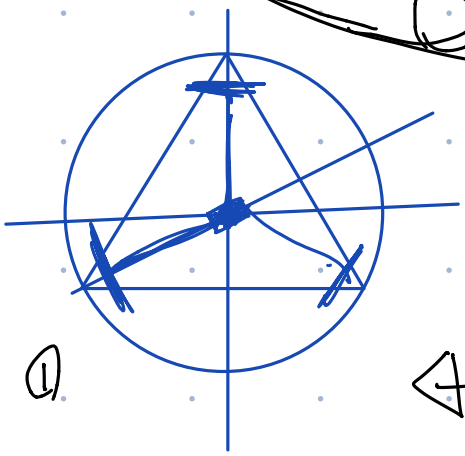







①
②
③
④
⑤
⑥





① ← 기울 PID 제어로 주파수값을 각각 준다.
그럼 수평맞춤.

③

② ← 우리 PID 제어로 각도값을 각각 준다.
그럼 수평맞출

omron
G5NB-1A-E DC24-01A1-