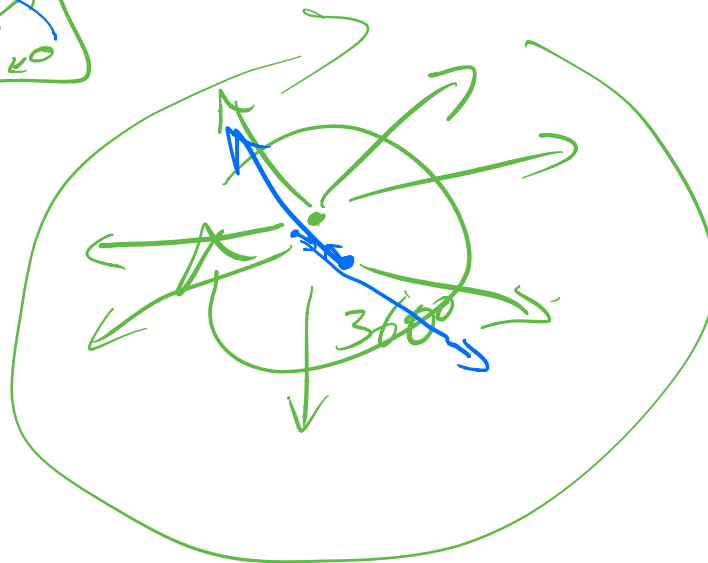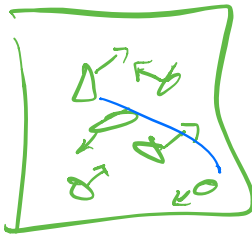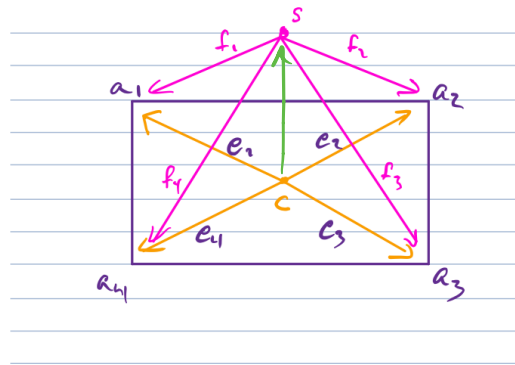$$a_i = c + e_i$$
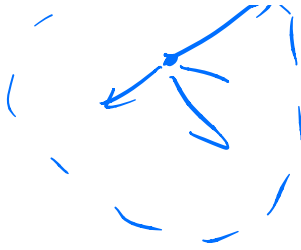
$$a_i = S + f_i$$
$$e_i = S - c + f_i$$

360

Oort

El código Enigma

Isla de Perros

$$1 + \cfrac{a}{1 + \cfrac{a}{1 + \cfrac{a}{1 + \dots}}} \qquad 1 + \cfrac{1}{1 + \cfrac{2}{1 + \cfrac{3}{1 + \cfrac{4}{14 \dots}}}}$$

$n = 0$	1
1	$1 + \frac{1}{1+1}$
2	$1 + \cfrac{1}{1 + \frac{1}{1+1}}$
3	$1 + \cfrac{1}{1 + \cfrac{1}{1 + \frac{1}{1+1}}}$
4	$1 + \cfrac{1}{1 + \cfrac{1}{1 + \cfrac{1}{1 + \frac{1}{1+1}}}}$

0	$1 = K_0$
1	$\frac{1}{1 + K_0} = \frac{1}{2} = K_1$
2	$\frac{1}{\frac{1}{2} + 1} = K_2$
3	$\frac{1}{K_2 + 1} = K_3$

Tarea para ahorita

1. Convertir lo que "hicimos" en una función
   phi() $\Rightarrow 1.6180339887\dots$

2. Crear la función phi(a)
   $$1 + \cfrac{a}{1 + \cfrac{a}{1 + \frac{a}{14 \dots}}}$$
   $\emptyset + \cfrac{1}{a + \cfrac{1}{a + \cfrac{1}{a + \dots}}}$

3. Crear la función nphi()
   $$1 + \cfrac{1}{1 + \cfrac{2}{1 + \cfrac{3}{1 + \frac{4}{1+5}}}}$$

n	$n\varphi$
1	2
2	$1 + \frac{1}{1+2} = 1.\bar{3}$
3	$1 + \cfrac{1}{1 + \frac{2}{1+3}} = 1 + \cfrac{1}{1 + \frac{2}{4}} = 1 + \frac{4}{6} = \frac{10}{6} = 1.\bar{6}$
4	$1 + \cfrac{1}{1 + \cfrac{2}{\dots}} = 1 + \cfrac{1}{\dots \frac{2}{\dots}} = 1 + \frac{1}{\dots}$

4. Crear la función mphi()

$$1 + \cfrac{1}{2 + \cfrac{1}{3 + \cfrac{1}{4 + \cfrac{1}{5+\dots}}}}$$

$$\overline{1+\tfrac{3}{1+4}} \qquad 1 + \cfrac{1}{1+\frac{3}{5}} \qquad 1 + \cfrac{1}{\frac{2}{5}}$$

$$= 1 + \cfrac{1}{18/8} = 1 + \frac{8}{18} = 1.\overline{4}$$

5. Crear la función fibo phi()

$$1 + \cfrac{1}{1 + \cfrac{1}{1 + \cfrac{2}{1 + \cfrac{3}{1 + \cfrac{5}{1 + \cfrac{8}{1 + \cfrac{13}{1+\dots}}}}}}}$$