

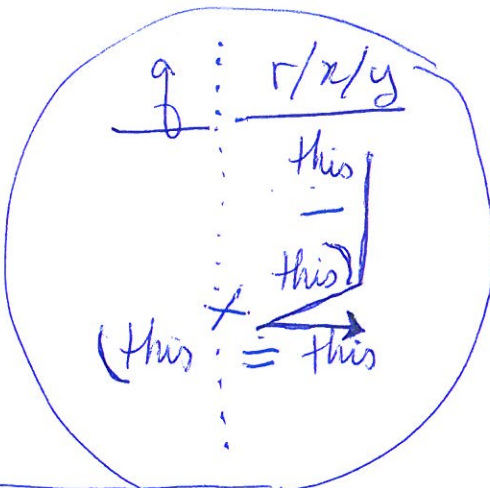
# Magic Box

index $i$	$q_{i-1}$	$r_{i-1}$	$x_i$	$y_i$
0		1180	0	1
1		482	1	0
2	2	216	-2	
3	2	50	5	-2
4	4	16	-22	9
5	3	2	+71	-29
6	8	0	590	241

$\leftarrow$  coeffs of eqn  
 $\leftarrow$  zero!  
 $\leftarrow$  (a, b div. by gcd)

example:

$q$	$x_i$
•	1
•	-2
2	5
•	•



$$1 - (-2 \times 2) = 5$$

ie. solution to

~~1180x + 482y = 2~~  
 $482x + 1180y = 2$