gcd(39, 24)

loop #	a	b	r	work it out
-	39	24	0	
1	24	15	15	39 % 24 = 15
2	15	9	9	24 % 15 = 9
3	9	6	6	15 % 9 = 6
4	6	3	3	9 % 6 = 3
~~5~~	~~3~~	~~0~~	~~0~~	~~6 % 3 = 0~~

~~returns 0?? Should return 3.~~

The while will check the value of r, then if condition is met, loop will end and return b will return a value of 3.