

137641				v = 0	bot = 0	side = 0
				u = 0	top = 0	
13		76		41		
bot = (0-0) ^ 13 = 13		bot = (13-9)^76 = 476		bot = (476-469) ^ 41 = 741		
side = 2*0 = 0		side = 2*3 = 6		side = 2*37 = 74		
v = 3*03 = 9 < 13 so 3		v = 7 * 6^7 = 469 < 476 so 7		v = 1 * 74^1 = 741 <= 741		
u = 3*3 = 9		u = 7*67 = 469		u = 741		
top = 03		top = 037		top = 371		

1024	v = 0 u = 0	bot = 0 top = 0	side = 0
10 bot = (0-0) ^ 10 = 10 side = 2*0 = 0 v = 3*03 = 9 < 10 so 3 u = 3*3 = 9 top = 03	24 bot = (10-9)^24 = 124 side = 2*3 = 6 v = 2 * 62 = 124 <= 124 so 2 u = 2*62 = 124 top = 032		

^

This Algorithm Finds the square root of a number input  
as x and returns it through top