Name: _____ **Email PID:** _____

Question Suppose that a hash table currently looks like:

index	status	content
0	full	87
1	vacant	
2	vacant	
3	full	13
4	full	44
5	vacant	
6	full	76
7	full	56
8	full	10
9	vacant	
10	vacant	

Suppose that the hashing scheme that's being used hashes the key value **42** to the home slot 6.

If the collision resolution strategy is quadratic probing, what slot will **42** wind up in?

Quadratic probing uses the probe sequence (HomeIndex + k^2) mod TableSize.

Since the table size is 11 and the home index is 6, the relevant slots would be: 6, 7, 10

Since slot 10 is empty, that is where 42 would be stored.