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HW #9

1. A. False B. True C. False

2. A, B, D, F, G, H

3.

0	0
1	1
2	
3	
4	
5	
6	15
7	7
8	

key a% 9

0	10
1	6
2	
3	
4	

key a% 5

4. The worst case is $(M-1)!$. An example of this is adding values that all hash to the same value. Each add will collide with the all values in the table. The only time this won't happen is the first add onto an empty table, which won't collide.

multiplication.
$0+1+2+\ldots+m-1$
(-3)

5. Binary search does not work on a chain because ordering is not guaranteed on a chain. In addition, there is a possibility that not every element in a chain has the same key.

multimap only.

Keys not guaranteed comparable