Difference between 3 and '3 in Excel

	Integer 3		3
	String 3	'3	

String 3 + Integer 3 = 3

Lecture Excel Example

6	What was the average mean temperatures for the following years?			
	2005	=AVERAGEIFS(G7:G114,A7:A114,B135)		
	2006			
	2007			
	2008			
	2009			
	2010			
	2011			
	2012			
	2013			

To lock the cell when you copy and paste down:

_fx_   =AVERAGEIFS($G$7:$G$114;$A$7:$A$114;B135)

"Dollar" sign lock the cell: $G$7 means never change G and 7

MAX()

7	What was the most precipitation that occurred in a month?			
	Answer:	=MAX(C7:C114)		
			New Function Max	

MIN()

8	What was the coldest average low?	
	Answer:	=MIN(F7:F114)

MATCH(LOOK_UP_VALUE, LOOKUP_ARRAY, MATCH_TYPE)

MATCH(): Finds the index of the look up value

10	What year did the coldest average low occur in?		
	Answer:	49	=MATCH(C149,F7:F114,0)

match_type : Optional. The number -1, 0, or 1. The match_type argument specifies how Excel matches lookup_value with values in lookup_array. The default value for this argument is 1.

Match_type	Behavior
1 or omitted	MATCH finds the largest value that is less than or equal to *lookup_value*. The values in the *lookup_array* argument must be placed in ascending order, for example: ...-2, -1, 0, 1, 2, ..., A-Z, FALSE, TRUE.
0	MATCH finds the first value that is exactly equal to *lookup_value*. The values in the *lookup_array* argument can be in any order.
-1	MATCH finds the smallest value that is greater than or equal to *lookup_value*. The values in the *lookup_array* argument must be placed in descending order, for example: TRUE, FALSE, Z-A, ...2, 1, 0, -1, -2, ..., and so on.

INDEX()

11	How many days did it snow in 2010?		
	Answer:	2009	=INDEX(A7:A114,C152,1)