



1. SUM: adds all the numbers that you specify as arguments.

Sum up all the numbers in cell K7 to K114.

<b>1 How many days total did the temperature stay below 32?</b>			
<b>Answer:</b>	<b>1069</b>	<b>=SUM(K7:K114)</b>	

2. SUMIFS: Adds the cells in a range that meet multiple criteria.

Sum up the numbers in cell K6 to K114 which with a "2009" in their column A.

<b>2 How many days in 2009 total did the temperature stay below 32?</b>			
<b>Answer:</b>	<b>114</b>	<b>=SUMIFS(K6:K114,A6:A114,"2009")</b>	

Here we change the criteria to be the number in cell C123.

<b>3 How many days in Year X total did the temperature stay below 32?</b>			
<b>X:</b>	<b>2008</b>		
<b>Answer:</b>	<b>127</b>	<b>=SUMIFS(K6:K114,A6:A114,C123)</b>	

3. COUNTIFS: Applies criteria to cells across multiple ranges and counts the number of times all criteria are met.

Here we have a conditional: less than Y degrees, so we should put this conditional into quotation marks. But as Y is stored in cell C128, if we write "< C128", C128 will no longer refer to a cell but become a string. Therefore, we should take it out of the "", and use a & to link between them.

<b>4 How many days in Year X was the average low colder than Y degrees?</b>			
<b>X:</b>	<b>2009</b>	How many months in Year X?	<b>12 =COUNTIFS(A6:A114,C127)</b>
<b>Y:</b>	<b>32</b>		
<b>Answer:</b>	<b>3</b>	<b>=COUNTIFS(A6:A114,C127,F6:F114,"&lt;" &amp; C128)</b>	

<b>5 How many months was there at least one day where the temperature stayed below 32?</b>			
<b>Answer:</b>	<b>63</b>	<b>=COUNTIFS(K6:K114,"&gt;0")</b>	