

Feet & Inches on a Regular Calculator

Here's how to add up a string of dimensions on a regular calculator.

First, a convention for entering dimensions into your calculator must be established. The tens, ones, and decimal places are to be used for entering inches. The hundreds, thousands, and all places to the left are to be used for entering feet. Figure 1 illustrates the convention for entering dimensions into your calculator. Some examples of how various dimensions would be entered are shown in the table below.

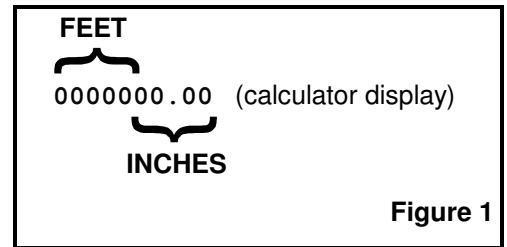


Figure 1

DIMENSION	5'-1/2"	2'-0"	20'-1"	11'-5/8"	127'- 8-7/8"
CALCULATOR ENTRY	5.5	200	2001	11.625	12708.875

To add up this string of dimensions: $18'-5" + 2'-0" + 7'-2"$
 Enter: $1805 + 200 + 702 = 2707$ or $27'-7"$

Now add 5'-6" to this result: $2707 + 506 = 3213$ or $32'-13"$ or $33'-1"$

There's a way to convert those excess inches into feet without having to do it in your head. One foot is expressed as 100. Twelve inches is expressed as 12. Add the conversion factor of 88 to 12 to express that dimension as one foot ($88 + 12 = 100$). The string of dimensions above added up to 3213. Add the conversion factor to that total ($3213 + 88$) and get 3301 ($33'-1"$) as the corrected result. What if the sum of your string of dimensions comes out to 4738 ($47'-38"$)? Add the conversion factor three times to get 5002 ($50'-2"$)!

This method works for subtracting dimensions as well. Subtract the conversion factor of 88 from the result to convert the excess inches to feet. If you're both adding and subtracting dimensions, complete the conversion of excess inches before changing operations.

If you're adding up an especially long string of dimensions, you have to add the conversion factor occasionally to keep the inches portion of your total from running over 99. That would produce an error. Similarly, when subtracting a long string of dimensions, subtract the conversion factor occasionally to keep the inches portion of your total from running below 12.