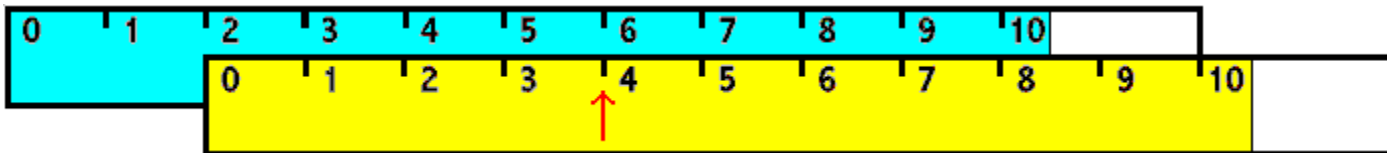


# An Addition Rule

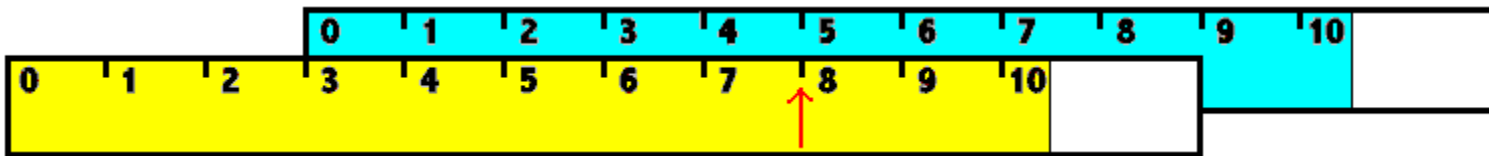
You can use a pair of rulers to add. It's easiest to think about if you imagine that the ruler only goes up to 10 inches. If you want to add 2 and 4, you could line up the 0 on the lower ruler with the 2 on the upper ruler. Then look for the four on the lower ruler and find that it lines up with 6 on the upper ruler.  $2 + 4$  is 6.



**What if you want to add to numbers which sum to more than 10 , such as 7 and 8? If you follow the exact same procedure and then look for the number on the upper ruler, you find that the upper ruler is not quite long enough!**



**Instead of lining up the 0 on the lower ruler with the 7 on the upper ruler, line up the 10 on the lower ruler with the 7 on the upper ruler. Now locate 8 on the lower ruler and read 5 above it on the upper ruler. You know that the number must be somewhere between 10 and 20, so your answer is  $10 + 5$  or 15.**



**This is not a very practical way to add, since you probably know your math facts to 18! It does, however, illustrate the principle behind multiplying with a slide rule.**