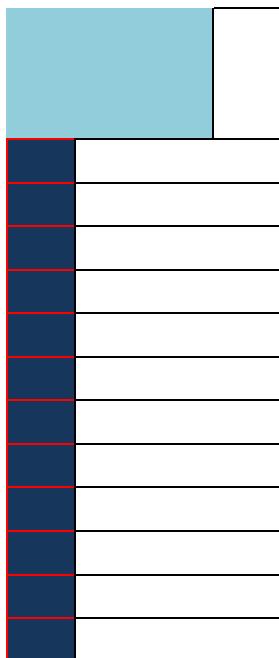
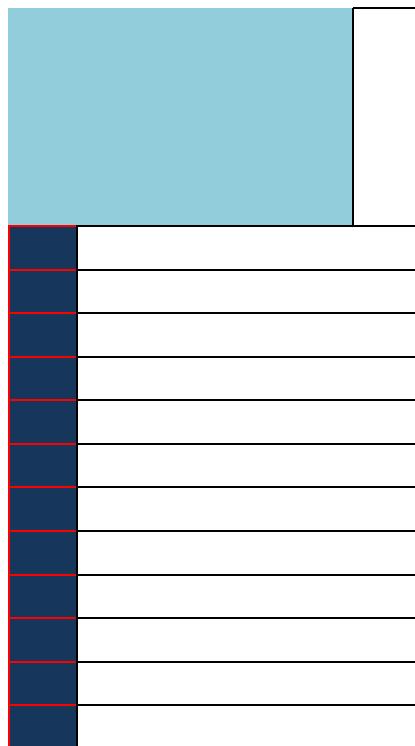


Base 3



$$\text{Dimension} = (x+1)(x+12)$$

Base 5



$$\text{Dimension} = (x+1)(x+12)$$

Conclusions:

The rule is that the two numbers in the brackets when multiply must get 12 since I'm fixed to have only 12 units.

So other possible rectangle dimensions are $(x+2)(x+6)$, $(x+3)(x+4)$.

The total number of possible dimensions that can be made will depend on the pair of factors that can be formed from the units.

Given: 1 square, lots of sticks and 100 units

The dimensions of rectangle can be $(x+1)(x+100)$, $(x+2)(x+50)$, $(x+4)(x+25)$, $(x+5)(x+20)$ for all bases.

Given: 1 square, p sticks and q units

Now that we have to meet with 2 fixed points p and q.

Therefore the sum of the 2 numbers in the brackets $(x + ?)(x + ?)$ must equal to p

and the product of the 2 numbers must be equal to q.