Base 5

Base 5

Base 4

Base 4

Dimension = (x+2)(x+10)   Dimension = (x+1)(x+11)

Conclusions:

Notice that when Im fixed with 12 sticks, my possible choice of rectangles can be made is up to 5.

Can also have dimesions like (x+3)(x+9), (x+4)(x+8), (x+5)(x+7) that will be good for all bases.

The rule is the 2 number add up to give 12, but cannot be 6+6 because that will give a square.

Given: 1 square, 100 sticks and lots of units

I can have different dimensions of rectangles of up to 49 kinds (100/2 -1 = 49)

Examples:

(x+1)(x+99)

(x+2)(x+98)

(x+3)(x+97)

….

(x+49)(x+51)