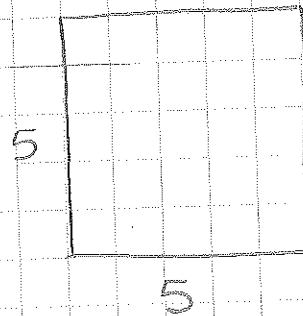
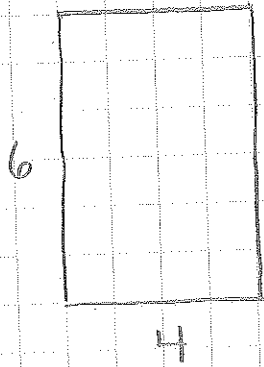
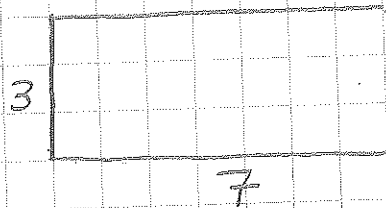


Frogs, Fleas, and Painted Cubes

Inv. 1.1



The area repeats if self
There is symmetry

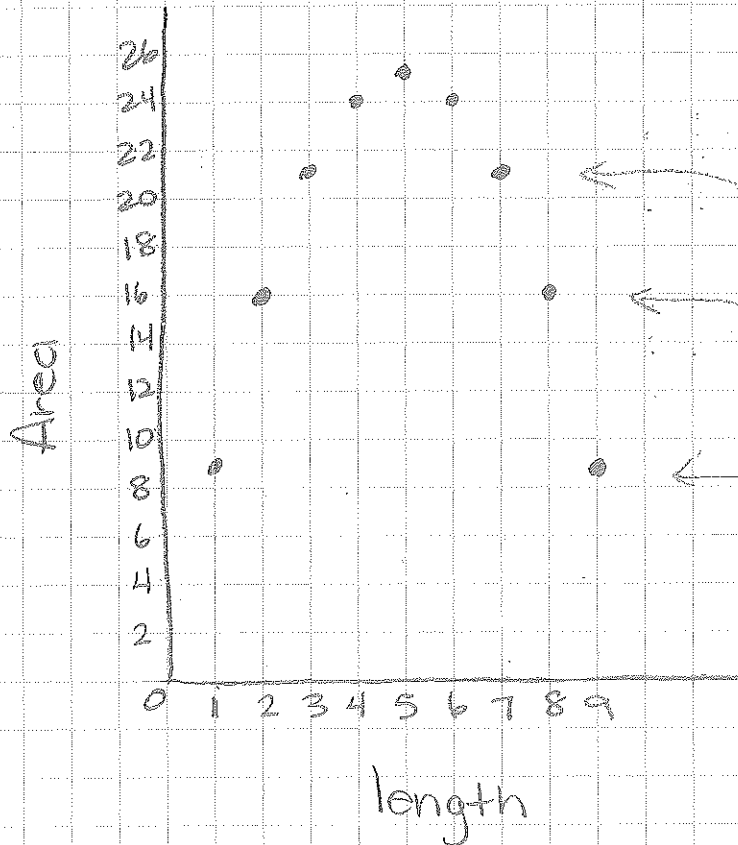


length	width	Area
1	9	9
2	8	16
3	7	21
4	6	24
5	5	25
6	4	24
7	3	21
8	2	16
9	1	9

Ask yourself...

Is a 1×9 rectangle different from a 9×1 rectangle?

Plots on Mars



The shape is a curve opening down

There is symmetry

The pattern in the table of the repeating area is shown in the symmetry

(B)

1. The dimensions of 5×5 give the greatest area.

2. No

a length of $5\frac{1}{2}$ and a width of $4\frac{1}{2}$ area of 24.75

$$20 - 11 = \frac{9}{2} = 4.5$$

which is less than 25.