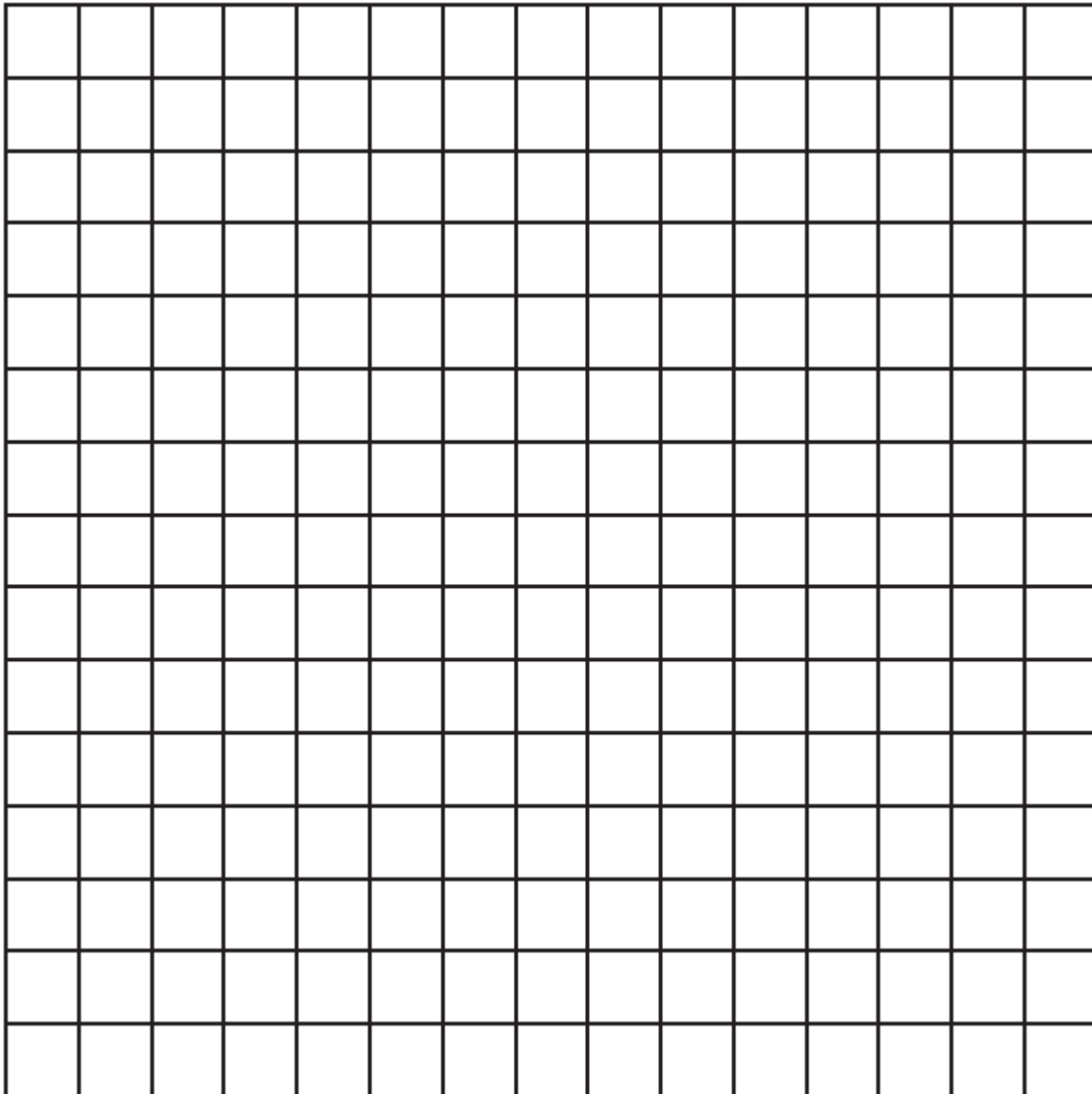




Designing Gardens

In the grid each cm represents a metre (that is the scale is 1cm: 1m). So each cm^2 represents a m^2 .



Some designers at 'Lovely Gardens' are using the grid to make drawings of gardens that have an area of 12m^2 (but, of course, 12cm^2 in their drawings). How many different garden designs can you make that have an area of 12cm^2 ?

Hint: the gardens do not have to be rectangular.

Look at all the designs. If each garden has to have a fence around its perimeter, would the same amount of fencing be needed for each of them?

One of the designers, Poppy, likes to design gardens that have at least one curved wall.

What might her designs look like, do you think?



Suppose, later in the day, the manager issues an order that the gardens have to be shrunk in area by a half. Draw the new designs. Remember that the shapes have to remain the same. So if you shrink a rectangle in area by a half, the 'new' shape should be a rectangle with an area of 6 cm^2 . **Does the fencing for each also reduce by half?**