

The fabulous dot planimeter

Finding the area of a weird shape is hard! So we superimpose dots on the picture, separated by 1cm (or whatever). Count the dots that lie inside the shape.



Counting the dots is like counting the squares, so gives a pretty good estimate of the area. Looks like 17 cm^2 (or whatever).

What if it's on the line?

A dot on the line represents an area of $1/2$. So those should be counted as half. Or equivalently, only count up half of them.

- If the dot isn't on the line, count it no matter what.
- If the dot is on the line and looks like \bullet , count it.
- If the dot is on the line and looks like \odot , don't count it.

