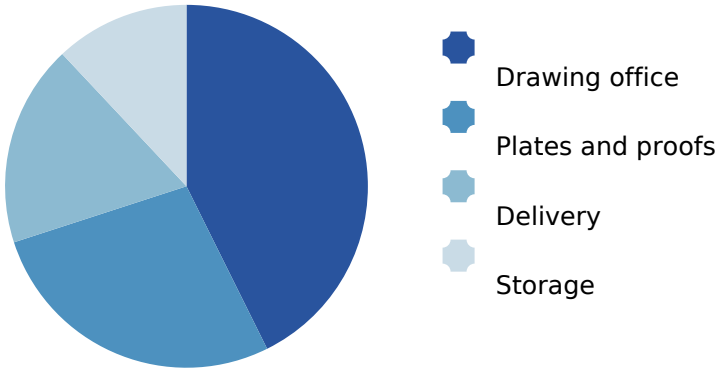
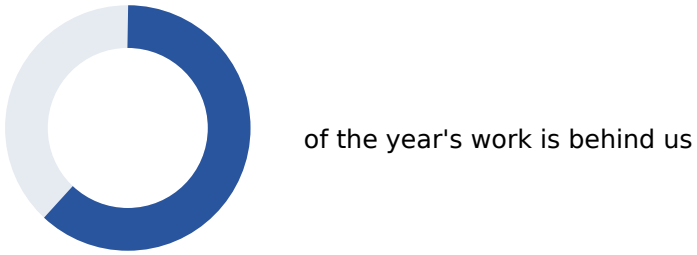
The month, drawn in curves

A page states a path with straight segments and cubic curves, and with nothing else: there is no circle operator and no arc operator. Every shape below was asked for by name — a centre and a radius, two angles, three points to pass through — and the curves were worked out for it. No piece bends further than a quarter turn, so a circle is four curves and the outline is out by a fortieth of a point on a circle an inch across.

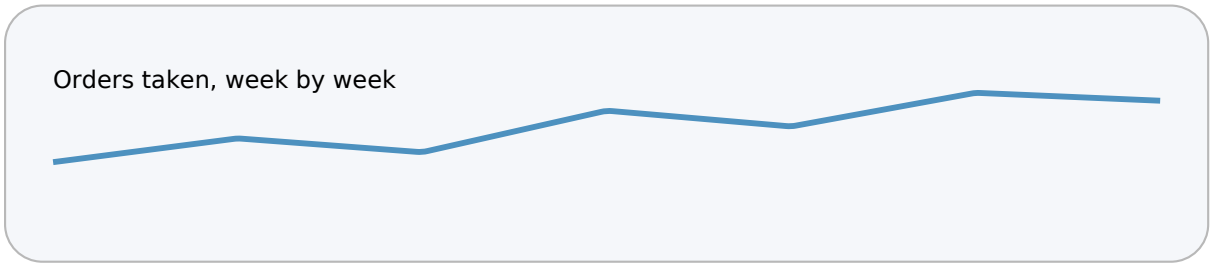
Where the hours went



How far into the year the work is



A card whose corners are eased off



Arcs told where to go, not how far to turn

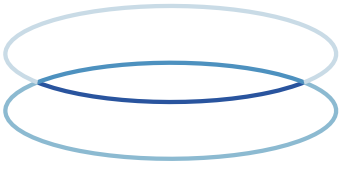
One arc, through three points



Radii enlarged



Four arcs, between the same two points

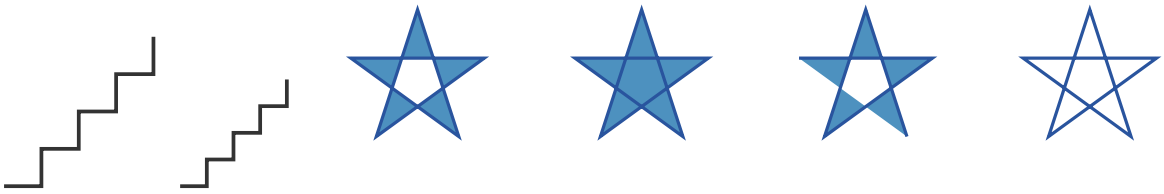


A curve costs six numbers and a straight segment costs two, so a circle is five lines of a page rather than one. What it does not cost is a picture: the shapes here are drawn by reading software at whatever size the page is shown, and they stay sharp at any of them.

Where the pen goes next

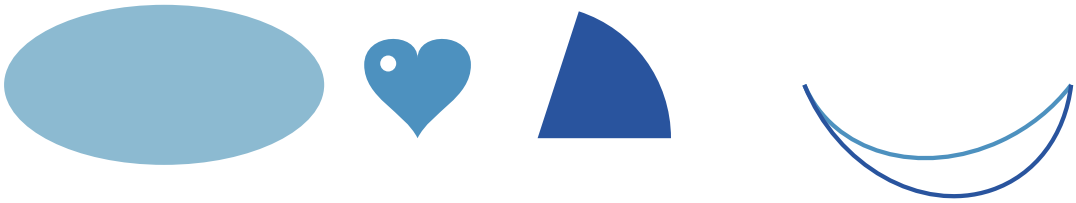
A point can be given from where the pen stands rather than from the corner of the page: a step across and up, or a turn and a length. A path is closed, filled and stroked in one operator, by either of the two rules that decide what is inside. The axes themselves can be moved, leaned, and put back as the page had them.

Steps from where the pen stands, and a star told by turns



Even-odd, closed | Non-zero, closed | Even-odd, left open | Outline, closed

An ellipse, a slice closed on its centre, and an arc turned



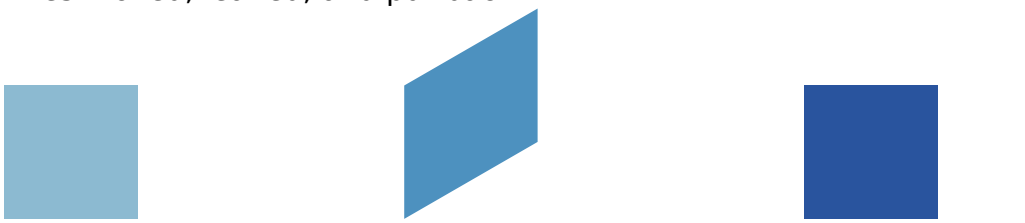
A heart given as SVG path data

Pointed joins cut off past a limit, and a dash begun partway



Limit 1.5: cut | Limit 10: pointed | [9 3 2 3] 5

Axes moved, leaned, and put back



Moved | Leaned | Put back inside a turn

Colours given by their numbers: grey, then the four inks



0.00 0.60 0.90 0.00 | 0.30 0.57 0.75