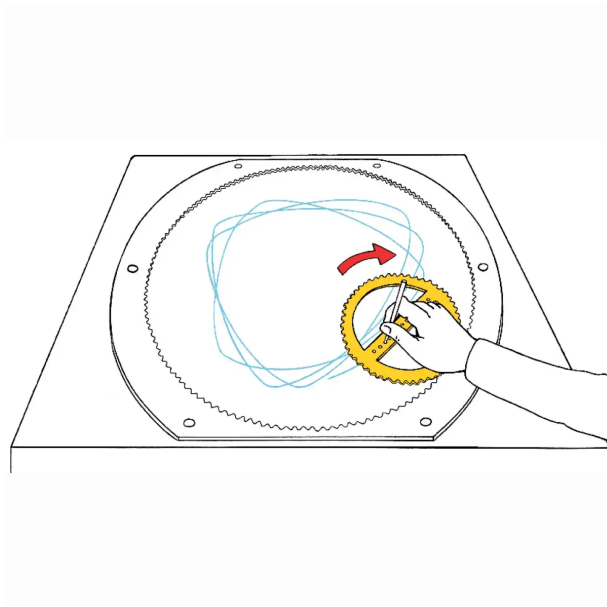


Giant spirograph

What patterns are created when drawing with the gears?



Select a gear and place it on the paper. The teeth must grip into the large, outer ring gear.

Note: It's easier to draw with the smaller than with the larger gears.

Hold a pen in one of the holes of the gear.

Spin the gear for several rounds and draw patterns. You can use a different coloured pen and draw a new pattern by placing the pen in a different hole.

If you like, you can try different gears, colours and holes in one drawing.

Pull out the paper when your artwork is finished. Cut the paper using the cutting machine, so you can take it home with you.

When unrolling a smaller circle in a larger circle, the resulting curves are called hypocycloids.

Depending on the radius of the inner gear and the fixed outer ring gear, completely different rosette-like figures will form (Fig. 1).

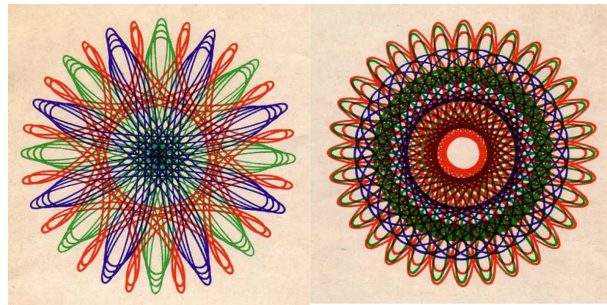


Fig. 1: Examples for various hypocycloids.