## The circle's limit

How many polygons can you form with the laser beam?


Turn the knob to move a mirror reflecting a laser beam up into the plexiglas disc.

Rotate the laser until the beam forms a closed figure with 4, 5, 6... sides.

In the limiting case when the number of sides increases, the laser path becomes closer and closer to a circle.

The polygons in this experiment appear inside a circular mirror. Their perimeters are therefore shorter than the circumference of the circle. The more sides the polygon has, the smaller the deviation from the circular shape and the more similar the perimeters become.

