## Constructing a hollow cylinder out of pieces

The surface of a hollow cylinder has three distinct pieces which are glued together; namely, the top, bottom and lateral faces. Geometrically this corresponds to two solid disks and a solid rectangle.


One can start the construction by attaching the top and bottom disks to the rectangle at single points of tangency.


The next steps are to glue the left and right edges of the rectangle together so that the bottom corner points coincide and the top corner points also coincide., and then to glue the top and bottom edges of the rectangle to the boundaries of the top and bottom disks. The green line on the lateral surface of the cylinder represents the result of gluing together the left and right edges of the rectangle.


