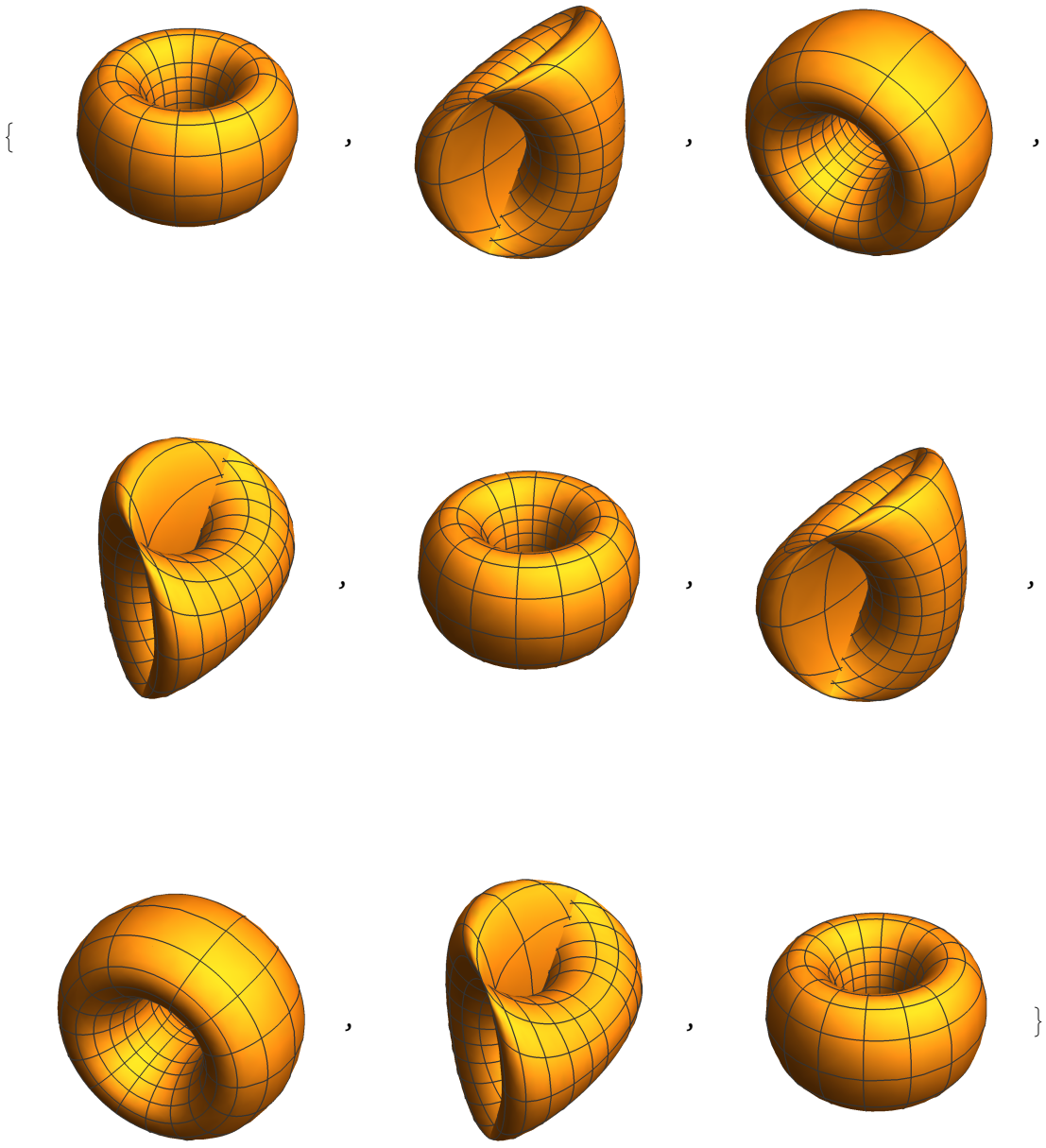
```
Torus[r_, R_] := Module[{θ, ϕ},
  ParametricPlot3D[{(R + r Cos[θ]) Cos[ϕ], (R + r Cos[θ]) Sin[ϕ], r Sin[θ]},
   {θ, 0, 2 π}, {ϕ, 0, 2 π}, Boxed → False, Axes → False]
 ]
```

```
Torus[1, 2]
```

```
Torus1[r_, α_: 0] := Module[{θ, ϕ, M, M1, st},
  (* Rotation matrix; rotates the x ,w- plane*)
  M = {{Cos[α], 0, 0, -Sin[α]}, {0, 1, 0, 0}, {0, 0, 1, 0}, {Sin[α], 0, 0, Cos[α]}};

  v = {r Cos[θ], r Sin[θ], r Cos[ϕ], r Sin[ϕ]}; (* A vector on the torus in  R^4 *)
  M1 = M.v; (* Rotate the points on the torus*)

  (* Stereographic projection of the torus onto R^3 using the point (0,0,0,1)*)
  st = {M1[[1]] / (1 - M1[[-1]]), M1[[2]] / (1 - M1[[-1]]), M1[[3]] / (1 - M1[[-1]])};

  ParametricPlot3D[ st, {θ, 0, 2 π}, {ϕ, 0, 2 π}, Boxed → False, Axes → False]
 ]
```

```
Torus1[1 / 2]
```

```
Table[Torus1[1/2, rota], {rota, 0, 2π, π/4}]
```



```
{Manipulate[Torus1[1/2, ra], {ra, 0, 2π}],
 Animate[Torus1[1/2, ra], {ra, 0, 2π, π/60}]}
```