How to fancy up matlab result

1. Option for `plot`: `'linewidth'`, `'markersize'`, `'markerfacecolor'`, `'color'`, etc.
2. Transparent figure: `alpha`
3. Hide axis: `axis off`
4. Normalize scale of axis: `axis equal`

Adding animation effect

1. Clean out figure: `drawnow`

Exercise

1. Draw the following 'figure-8 knot' in $\mathbf{R}^3$:

$$c(t) = ((2+\cos 2t)\cos 3t, (2+\cos 2t)\sin 3t, \sin 4t), t \in [0, 2\pi]$$

   Give an animation effect of the point moving along the curve.

2. Draw the Mobius band:

$$X(s,t) = ((2+s\cos(t/2))\cos t, (2+s\cos(t/2))\sin t, s\sin(t/2)), (s,t) \in [-1,1] \times [0,2\pi]$$

   (a) Give an animation effect of the point moving along the boundary of the Mobius band.

3. Draw *hypocycloid* for $a = 5$ and $b = 3$.