The Folium of Descartes


The Newton Knot


## An elliptic curve



$$
y^{2}-x(x+1)(x-1)=0
$$

The Figure eight curve


$$
x^{4}-21\left(x^{2}-y^{2}\right)=0
$$

## Durer's shell curve



A rather complicated curve ...


## ... with this equation

$$
\begin{array}{r}
-\left(4(1+x+y)(y+x+x y) x y-(y+x+x y)^{3}\right. \\
\left.-4 x^{2} y^{2}\right)\left(16(y+x+x y)^{5}(1+x+y)^{2} x^{2}\right. \\
y^{2}+64(1+x+y)(y+x+x y) x^{5} y^{5} \\
-80(y+x+x y)^{4}(1+x+y) x^{3} y^{3} \\
-8(y+x+x y)^{7}(1+x+y) x y-64 x^{6} y^{6} \\
+80(y+x+x y)^{3} x^{4} y^{4} \\
\left.+20(y+x+x y)^{6} x^{2} y^{2}+(y+x+x y)^{9}\right)=0
\end{array}
$$

The Barth sextic: a degree 6 surface


The Clebsch diagonal surface


## The Steiner roman surface



The intersection of two kummer surfaces


The 16 nodal quartic surface


