

$$\begin{aligned}
\bar{\mathbb{K}} &\xrightarrow[t \mapsto \left(-\frac{bt+c}{a}:t\right)]{\text{line}} \begin{cases} x:y \in \mathbb{K}^2 \\ ax+by+c=0 \end{cases} \subset \mathbb{K}^2 \\
\bar{\mathbb{K}} &\xrightarrow[t \mapsto (t^2:t)]{\text{parabola}} \begin{cases} x:y \in \mathbb{K}^2 \\ x=y^2 \end{cases} \subset \mathbb{K}^2 \\
\bar{\mathbb{K}} &\xrightarrow[t \mapsto \left(\frac{2at}{1+t^2}:\frac{b(1-t^2)}{1+t^2}\right)]{\text{ellipse}} \begin{cases} x:y \in \mathbb{K}^2 \\ (x/a)^2 + (y/b)^2 = 1 \end{cases} \subset \mathbb{K}^2 \\
\bar{\mathbb{K}} &\xrightarrow[t \mapsto \left(\frac{a(1+t^2)}{2t}:\frac{b(1-t^2)}{2t}\right)]{\text{hyperbola}} \begin{cases} x:y \in \mathbb{K}^2 \\ (x/a)^2 - (y/b)^2 = 1 \end{cases} \subset \mathbb{K}^2 \\
\bar{\mathbb{K}} &\xrightarrow[t \mapsto \left(\frac{1}{t}:t\right)]{\text{hyperbola}} \begin{cases} x:y \in \mathbb{K}^2 \\ xy=1 \end{cases} \subset \mathbb{K}^2 \\
\bar{\mathbb{K}} &\xrightarrow[t \mapsto (t^2:t^3)]{\text{cuspidal cubic}} \begin{cases} x:y \in \mathbb{K}^2 \\ x^3=y^2 \end{cases} \subset \mathbb{K}^2 \\
\bar{\mathbb{K}} &\xrightarrow[t \mapsto (t^2-1:t(t^2-1))]{\text{nodal cubic}} \begin{cases} x:y \in \mathbb{K}^2 \\ y^2=x^2(x+1) \end{cases} \subset \mathbb{K}^2 \\
\bar{\mathbb{K}} &\xrightarrow[t \mapsto (t^m:t^n)]{\text{monomial curve}} \begin{cases} x:y \in \mathbb{K}^2 \\ x^n=y^m \end{cases} \subset \mathbb{K}^2
\end{aligned}$$