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% !TEX encoding = UTF-8 Unicode
% !TEX program = pdflatex
\documentclass{article}
\usepackage{tikz}
\begin{document}
\begin{tikzpicture}
\draw[>-] (-4, 0) -- (6, 0) node[below]{$x$ axis};
\draw[>-] (0, -2) -- (0, 8) node[above]{$y$ axis};
\def\p{-14}
\def\q{-17}
\draw plot[variable = \t, domain = -4:6, samples = 100]
({\t}, {( (\t)^3 + \p*\t + \q)/20});
\pgfmathsetmacro\inacos{3*\q*sqrt(-3/\p)/2/\p}
\pgfmathsetmacro\acos{acos(\inacos)}
\pgfmathsetmacro\radi{2*sqrt(-\p/3)}
\pgfmathsetmacro\incosi{\acos/3-120}
\pgfmathsetmacro\incosii{\acos/3-240}
\pgfmathsetmacro\incosiii{\acos/3-360}
\pgfmathsetmacro\rooti{\radi*cos(\incosi)}
\pgfmathsetmacro\rootii{\radi*cos(\incosii)}
\pgfmathsetmacro\rootiii{\radi*cos(\incosiii)}
\draw [teal] (0, 5) circle(\radi);
\draw [teal] (0, 5) -- +(\incosi:\radi) -- (\rooti, 0);
\draw [teal] (0, 5) -- +(\incosii:\radi) -- (\rootii, 0);
\draw [teal] (0, 5) -- +(\incosiii:\radi) -- (\rootiii, 0);
\end{tikzpicture}
\end{document}
```