

```
% !TEX encoding = UTF-8 Unicode
% !TEX program = pdflatex
\documentclass{article}
     \usepackage{tikz}
\begin{document}
     \begin{tikzpicture}
         \draw[->] (-5, 0) -- (5, 0) node[right]{$x$ axis};
         \draw[->] (0, -5) -- (0, 5) node[above]{$y$ axis};
         \def\a\{0.2\}
         \left( b\{0.5\} \right)
         \left( -2 \right)
         \forall raw plot[variable = \t, domain = -5:5, samples = 100]
              (\{\t\}, \{\a_{\star}(\t)^2 + \b_{\star}\t + \c\});
         \draw(0, \c) circle(1pt) node[below right]{$y$-intercept};
         \pgfmathsetmacro\rooti{
              (-\b + sqrt((\b)^2 - 4_{\star}\a_{\star}\c))
              (2_{\star} \backslash a)
         \pgfmathsetmacro\rootii{
              (-\b - sqrt((\b)^2 - 4_{\star}a_{\star}c))
              (2_{\star} \backslash a)
         \draw(\rooti, 0) circle(1pt) node[below right]{$x$-intercept};
         \draw(\rootii, 0) circle(1pt) node[above right]{$x$-another};
     \end{tikzpicture}
\end{document}
```