

```
\begin{tikzpicture}
  \begin{axis}[
    axis lines=middle,
    xmin=-5, xmax=5,
    ymin=-5, ymax=5,
    xtick={-5,-4,-3,-2,-1,0,1,2,3,4,5},
    ytick={-5,-4,-3,-2,-1,0,1,2,3,4,5},
    xlabel style={below right},
    ylabel style={above left},
    grid=both
  ]
  \addplot[domain=-5:5,smooth,red,thick] {x};
  \node[right] at (axis cs: 1.5,1) {$C_f$};
\end{axis}
\end{tikzpicture}
```

