



Hello
 茂木嘉之
 できたかな
 OK のようだ

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\begin{figure}
\begin{tikzpicture}[x=1mm,y=1mm,scale=1.0]
%----- AC
  \draw(8,12) -- (8,32);
  \draw(8,-12) --(8,-32);
  \draw(0,0)sin(4,4);
  \draw(4,4)cos(8,0);
  \draw(8,0)sin(12,-4);
  \draw(12,-4)cos(16,0);
  \draw(8,0) circle [radius=12.0];

%----- R
  \draw(8,32)--(40,32)--(40,12);
  \draw(8,-32)--(40,-32)--(40,-12);
  \draw(36,12)--(44,12)--(44,-12)--(36,-12)--(36,12);

%----- L
  \draw(60,32)--(60,12);
  \draw(60,-32)--(60,-12);
  \draw(60,12) arc [start angle=90,end angle=-90,radius=4.0];
  \draw(60,4) arc [start angle=90,end angle=-90,radius=4.0];
  \draw(60,-4) arc [start angle=90,end angle=-90,radius=4.0];

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%----- C
\draw(80,32) -- (80,2);
\draw(80,-32)--(80,-2);
\draw(76,2)--(84,2);
\draw(76,-2)--(84,-2);

%----- line up
\draw(40,32)--(80,32);
\draw(40,-32)--(80,-32);
\fill[black](40,32) circle [radius=1.0];
\fill[black](60,32) circle [radius=1.0];
\fill[black](40,-32) circle [radius=1.0];
\fill[black](60,-32) circle [radius=1.0];

\end{tikzpicture}
\end{figure}

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