An example of including a graphic in a $\mathrm{AT}_{\mathrm{E}} \mathrm{X}$ document:

```
\documentclass{article}
\usepackage{graphics}
\begin{document}
Here, we illustrate
the phenomenon known as
''beats.''
\begin{figure} [h]
    \scalebox{.5}
    {\includegraphics{fig.eps}}
    \caption{$\sin(x/2)
    \sin(5x)$}
\label{Fig:beats}
\end{figure}
\end{document}
```

Some key points to notice:

- We included the graphics package with a kagecommandintheheadofthedocument,tomakethegraphicsmacrosavailable,${}^{1}$undefinedundefinedundefinedundefinedundefinedundefinedundefinedundefinedundefinedundefinedundefinedundefinedundefinedundefinedundefinedundefinedundefinedundefinedundefinedundefinedundefinedundefined
- The command that imports the graphic is )\). The rest of the commands around that govern the appearance of the included graphic and the context it appears in the page,
- The file that we're included is called fig.eps and is located in the same directory that we're working in. This is an Encapsulated PostScript file.
- We used the \scalebox\{amount to scale\}\{stuff to scale\} command to reduce the size of the included graphics to $50 \%$. Without linebreaks, this is (from above) \scalebox\{. 5$\}\{\backslash$ includegraphics\{fig.eps $\}$ \}.
- The figure environment makes a reasonable guess as to where the graphic should be placed in the document; we can specify a place with an optional argument-we used [h] (put the figure "here"), and other options are [b] (at the bottom of the page), [t] (at the top of the page) and [p] (on a separate page). You can give multiple options (say, [ht]) to put the figure either "here" or at the top of the page. Note that regardless of the order of the arguments; the precedence is always htb. Without the optional argument, the command would just be \begin\{figure\} }
- The \caption macro keeps track of a figure counter, and puts the figure caption in as shown. Notice that we used \label to be able to refer figure 1 here with the $\backslash$ ref command $\backslash$ ref $\{$ Fig:beats $\}$.

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[^0]:    ${ }^{1}$ There is also a package called graphicx, which is generally more powerful than the graphics package.

