

```

\ifhmode
\ifvmode
\ifmmode
\ifinner

```

These commands test what mode T<sub>E</sub>X is in:

- `\ifhmode` is true if T<sub>E</sub>X is in ordinary or restricted horizontal mode.
- `\ifvmode` is true if T<sub>E</sub>X is in ordinary or internal vertical mode.
- `\ifmmode` is true if T<sub>E</sub>X is in text math or display math mode.
- `\ifinner` is true if T<sub>E</sub>X is in an “internal” mode: restricted horizontal, internal vertical, or text math.

*Example:*

```

\def\modes{{\bf
  \ifhmode
    \ifinner IH\else H\fi
  \else\ifvmode
    \ifinner \hbox{IV}\else \hbox{V}\fi
  \else\ifmmode \hbox{M}\else
    error\fi\fi\fi}}
Formula $\modes$; then \modes,
  \hbox{next \modes\ and \vbox{\modes}}}.
\par\modes

```

*produces:*

Formula M; then **H**, next **IH** and **IV**.  
**V**