1

```
\ifhmode
\ifvmode
\ifmmode
\ifinner
```

These commands test what mode TEX is in:

- `\ifhmode` is true if TEX is in ordinary or restricted horizontal mode.
- `\ifvmode` is true if TEX is in ordinary or internal vertical mode.
- `\ifmmode` is true if TEX is in text math or display math mode.
- `\ifinner` is true if TEX 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