

```

\hrule
\hrule height <dimen> width <dimen> depth <dimen>
\vrule
\vrule width <dimen> height <dimen> depth <dimen>

```

The `\hrule` command produces a horizontal rule; the `\vrule` command produces a vertical rule. You can specify any or all of the width, height, and depth of the rule—T_EX supplies default values for those that you omit. You can give the dimensions of the rule in any order; the forms listed above show just two of the possible combinations. You can even give a dimension of a given kind more than once—if you do, the last one is the one that counts.

If you don't specify the width of a horizontal rule, the rule is extended horizontally to the boundaries of the innermost box or alignment that contains the rule. If you don't specify the height of a horizontal rule, it defaults to 0.4pt; if you don't specify the depth of a horizontal rule, it defaults to 0pt.

If you don't specify the width of a vertical rule, it defaults to 0.4pt. If you don't specify the height or the depth of a vertical rule, the rule is extended to the boundary of the innermost box or alignment that contains the rule.

T_EX treats a horizontal rule as an inherently vertical item and a vertical rule as an inherently horizontal item. Thus a horizontal rule is legal only in a vertical mode, while a vertical rule is legal only in a horizontal mode. If this seems surprising, visualize it—a horizontal rule runs from left to right and separates vertical items in a sequence, while a vertical rule runs up and down and separates horizontal items in a sequence.

Example:

```

\hrule\smallskip
\hrule width 2in \smallskip
\hrule width 3in height 2pt \smallskip
\hrule width 3in depth 2pt

```

produces:



2

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Example:

```
% Here you can see how the baseline relates to the
% height and depth of an \hrule.
\leftline{
  \vbox{\hrule width .6in height 5pt depth 0pt}
  \vbox{\hrule width .6in height 0pt depth 8pt}
  \vbox{\hrule width .6in height 5pt depth 8pt}
  \vbox{\hbox{ baseline}\kern 3pt \hrule width .6in}
}
```

produces:

Example:

```
\hbox{( {\vrule} {\vrule width 8pt} )}
\hbox {( {\vrule height 13pt depth 0pt}
  {\vrule height 13pt depth 7pt} x)}
```

% the parentheses define the height and depth of each of the
 % two preceding boxes; the ‘x’ sits on the baseline

produces:
