1

\leaders ⟨*box or rule*⟩ ⟨*skip command*⟩
\cleaders ⟨*box or rule*⟩ ⟨*skip command*⟩
\xleaders ⟨*box or rule*⟩ ⟨*skip command*⟩

These commands produce leaders, i.e., they fill a horizontal or vertical space with copies of a pattern (see "leaders", p. '`leaders`'). The ⟨*box*⟩ or ⟨*rule*⟩ specifies a leader, i.e., a single copy of the pattern, while the ⟨*skip command*⟩ specifies a window to be filled with a row or a column of the leaders. The pattern is repeated as many times as will fit into the window. If ⟨*skip command*⟩ is a horizontal skip, the window contains a row of leaders and TeX must be in a horizontal mode; if ⟨*skip command*⟩ is a vertical skip, the window contains a column of leaders and TeX must be in a vertical mode.

The commands differ in how they arrange the repeated pattern in the space and where they put any leftover space:

- For \leaders, TeX aligns a row of leaders with the left end of the innermost box B that is to contain the result of the \leaders command. It aligns a column of leaders with the top of B. Those leaders that fall entirely within the window are retained. Any leftover space at the top and bottom of the window is left empty.
- For \cleaders, the leaders are centered within the window.
- For \xleaders the pattern is uniformly distributed throughout the window. If the leftover space is l and the leader is repeated n times, TeX puts space of width or height $l/(n+1)$ between adjacent leaders and at the two ends (left and right or top and bottom) of the leaders.

Example:
```
\def\pattern{\hbox to 15pt{\hfil.\hfil}}
\line{Down the Rabbit-Hole {\leaders\pattern\hfil} 1}
\line{The Pool of Tears {\leaders\pattern\hfil} 9}
\line{A Caucus-Race and a Long Tale {\cleaders\pattern
      \hfil} 19}
\line{Pig and Pepper {\xleaders\pattern\hfil} 27}
```
produces:

Down the Rabbit-Hole   1
The Pool of Tears   9
A Caucus-Race and a Long Tale   19
Pig and Pepper   27

2   \   §*0*

Example:
```
\def\bulletfill{\vbox to 3ex{\vfil\hbox{$\bullet$}\vfil}}%
\def\mybox{\vbox to 1in}
\def\myrule{\hrule width 4pt}\hsize=2in
\hrule \line{%
   \mybox{\myrule depth 8pt \leaders\bulletfill\vfill}
   \hfil
   \mybox{\myrule depth 15pt \leaders\bulletfill\vfill}
   \hfil
   \mybox{\myrule depth 18pt \cleaders\bulletfill\vfill}
   \hfil
   \mybox{\myrule depth 12pt \xleaders\bulletfill\vfill}%
}\hrule
```
produces: