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☞ ≍ \asymp   ≫ \gg   ⋈ \bowtie
   ≅ \cong   ≪ \ll   ∝ \propto
   ⊣ \dashv   ⊨ \models   ≈ \approx
   ⊢ \vdash   ≠ \ne   ∼ \sim
   ⊥ \perp   ≠ \neq   ≃ \simeq
   | \mid   ∉ \notin   ⌢ \frown
   ‖ \parallel   ∈ \in   ⌣ \smile
   ≐ \doteq   ∋ \ni   ⊂ \subset
   ≡ \equiv   ∋ \owns   ⊆ \subseteq
   ≥ \ge   ≺ \prec   ⊃ \supset
   ≥ \geq   ⪯ \preceq   ⊇ \supseteq
   ≤ \le   ≻ \succ   ⊑ \sqsubseteq
   ≤ \leq   ⪰ \succeq   ⊒ \sqsupseteq

These commands produce the symbols for various relations. Relations
are one of T_EX's classes of math symbols. T_EX puts different amounts
of space around different classes of math symbols. When T_EX needs to
break a line of text within a math formula, it will consider placing the
break after a relation—but only if the relation is at the outermost level
of the formula, i.e., not enclosed in a group.

In addition to the commands listed here, T_EX treats '=' and the "arrow"
commands (p. '`arrows`') as relations.

Certain relations have more than one command that you can use to
produce them:

- '≥' (\ge and \geq).
- '≤' (\le and \leq).
- '≠' (\ne, \neq, and \not=).
- '∋' (\ni and \owns).

You can produce negated relations by prefixing them with \not, as fol-
lows:

≭ \not\asymp   ⪇ \not\leq   ≄ \not\simeq
≇ \not\cong   ⊀ \not\prec   ⊄ \not\subset
≢ \not\equiv   ⋠ \not\preceq   ⊈ \not\subseteq
≠ \not=   ⊁ \not\succ   ⊅ \not\supset
≱ \not\ge   ⋡ \not\succeq   ⊉ \not\supseteq
≱ \not\geq   ≉ \not\approx   ⋢ \not\sqsubseteq
⪇ \not\le   ≁ \not\sim   ⋣ \not\sqsupseteq

Example:

```
We can show that $AB \perp AC$, and that
$\triangle ABF \not\sim \triangle ACF$.
```

produces:

We can show that $AB \perp AC$, and that $\triangle ABF \not\sim \triangle ACF$.