`math mode`.   A *math mode* is a mode that TEX is in when it is building a math formula. TEX has two different math modes: text math mode for building a formula to be embedded within a line of text, and display math mode for building a formula to appear on a line by itself. You indicate text math mode by enclosing the formula in `$`'s, and display math mode by enclosing the formula in `$$`'s. An important property of both math modes is that *input spaces don't count*. See pages 290–293 of *The TEXbook* for details on how TEX responds to different commands in math mode.