



FIGURE P3-7

Problems 3-21 to 3-22. Straight-line walking beam eightbar transport mechanism

- 3-21 Figure P3-7 shows a walking-beam transport mechanism that uses a fourbar coupler curve, replicated with a parallelogram linkage for parallel motion. Note the duplicate crank and coupler shown ghosted in the right half of the mechanism—they are redundant and have been removed from the duplicate fourbar linkage. Using the same fourbar driving stage (links L_1, L_2, L_3, L_4 with coupler point P), design a Watt-I sixbar linkage that will drive link 8 in the same parallel motion using two fewer links.
- *3-22 Find the maximum and minimum transmission angles of the fourbar driving stage (links L_1, L_2, L_3, L_4) in Figure P3-7 (to graphical accuracy).

* This figure is provided as an animated Working Model file on the CD-ROM. Its filename is the same as the figure number.

* Answers in Appendix F.