FIGURE P5-4

Data for Problems 5-21 to 5-26

* Answers in Appendix F.

† These problems are suited to solution using *Mathcad, Matlab,* or *TKSolver* equation solver programs. In most cases, your solution can be checked with program FOURBAR, SLIDER, or SIXBAR.

†5-21 Design a fourbar linkage to carry the box in Figure P5-4 from position 1 to 2 without regard for the fixed pivots shown. Use points *A* and *B* for your attachment points. Determine the range of the transmission angle. The fixed pivots should be on the base.

†5-22 Design a fourbar linkage to carry the box in Figure P5-4 from position 1 to 3 without regard for the fixed pivots shown. Use points *A* and *B* for your attachment points. Determine the range of the transmission angle. The fixed pivots should be on the base.

†5-23 Design a fourbar linkage to carry the box in Figure P5-4 from position 2 to 3 without regard for the fixed pivots shown. Use points *A* and *B* for your attachment points. Determine the range of the transmission angle. The fixed pivots should be on the base.

†5-24 Design a fourbar linkage to carry the box in Figure P5-4 through the three positions shown in their numbered order without regard for the fixed pivots shown. Determine the range of the transmission angle. Use any points on the object as your attachment points. The fixed pivots should be on the base.

†5-25 Design a fourbar linkage to carry the box in Figure P5-4 through the three positions shown in their numbered order without regard for the fixed pivots shown. Use points *A* and *B* for your attachment points. Determine the range of the transmission angle. Add a driver dyad with a crank to control the motion of your fourbar so that it cannot move beyond positions one and three.

*†5-26 Design a fourbar linkage to carry the box in Figure P5-4 through the three positions shown in their numbered order using the fixed pivots shown. Determine the range of the transmission angle. Add a driver dyad with a crank to control the motion of your fourbar so that it cannot move beyond positions one and three.