



FIGURE P5-6

Data for Problems 5-31 to 5-33

- †5-31 Design a fourbar linkage to carry the object in Figure P5-6 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 can not move beyond positions one and three.
- †5-32 Design a fourbar linkage to carry the object in Figure P5-6 through the three positions shown in their numbered order without regard for the fixed pivots shown. Use any points on the object as attachment points. The fixed pivots should be on the base. 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.
- \*†5-33 Design a fourbar linkage to carry the object in Figure P5-6 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.

\* 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*.