



(d) Sixbar linkage

- <sup>\*†</sup>10-34 Figure P7-30d (p. 398) shows a sixbar mechanism with link lengths given in centimeters. The crank (2) is 30 mm wide by 10 mm thick. The couplers (3 and 5) are both 24 mm wide by 8 mm thick. The rocker (4) is 40 mm wide by 12 mm thick. All links are made from steel. The ends of the links have a full radius equal to one-half of the link width. The pivot pins all have a diameter of 8 mm. Find the moment of inertia of the crank and rocker about their fixed pivots and the moment of inertia of the couplers about their CGs.

\* Answers in Appendix F.

† These problems are suited to solution using *Mathcad*, *Matlab*, or *TKSolver* equation solver programs.