



FIGURE P2-10

Problem 2-29 James Watt's sun and planet drive

2-29 Figure P2-10 shows Watt's sun and planet drive that he used in his steam engine. The beam 2 is driven in oscillation by the piston of the engine. The planet gear is fixed rigidly to link 3 and its center is guided in the fixed track 1. The output rotation is taken from the sun gear 4. Sketch a kinematic diagram of this mechanism and determine its mobility. Can it be classified by the Barker scheme? If so, what Barker class and subclass is it?

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