

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

FIGURE P4-3

Problems 4-11 to 4-12. Terminology for inversion #3 of the fourbar slider-crank linkage

*4-11 The link lengths and the value of θ_2 and γ for some inverted fourbar slider-crank linkages are defined in Table P4-3. The linkage configuration and terminology are shown in Figure P4-3. For the rows assigned, draw the linkage to scale and graphically find both open and crossed solutions for angles θ_3 and θ_4 and vector \mathbf{R}_B .

*†4-12 Repeat Problem 4-11 except solve by the vector loop method.

TABLE P4-3 Data for Problems 4-11 to 4-12

Row	Link 1	Link 2	Link 4	γ	θ_{2}	
а	6	2	4	90	30	
b	7	9	3	75	85	
С	3	10	6	45	45	
d	8	5	3	60	25	
е	8	4	2	30	75	
f	5	8	8	90	150	

^{*} 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.