

**FIGURE P7-2**

Configuration and terminology for problems 7-5 to 7-6 and 7-58

- 7-93 The general linkage configuration and terminology for an offset fourbar slider-crank linkage are shown in Fig P7-2 (p. 381). The link lengths and the values of  $d$ ,  $\dot{d}$ , and  $\ddot{d}$  are defined in Table P7-5. For the row(s) assigned, find the acceleration of the pin joint A and the angular acceleration of the crank using a graphical method.
- 7-94 The general linkage configuration and terminology for an offset fourbar slider-crank linkage are shown in Fig P7-2 (p. 381). The link lengths and the values of  $d$ ,  $\dot{d}$ , and  $\ddot{d}$  are defined in Table P7-5. For the rows assigned, find the acceleration of pin joint A and the angular acceleration of the crank using the analytic method. Draw the linkage to scale and label it before setting up the equations.

**TABLE P7-5 Data for Problems 7-93 to 7-94<sup>‡</sup>**

Row	Link 2	Link 3	Offset	$d$	$\dot{d}$	$\ddot{d}$
a	1.4	4	1	2.5	10	0
b	2	6	-3	5	-12	5
c	3	8	2	8	-15	-10
d	3.5	10	1	-8	24	-4
e	5	20	-5	15	-50	10
f	3	13	0	-12	-45	50
g	7	25	10	25	100	18

<sup>‡</sup> Drawings of these linkages are in the *PDF Problem Workbook* folder on the DVD.