



Note: Moments causing clockwise rotation of joints considered positive.  
 Moments in in. kips

KEY TO OPERATIONS	
1	Apply Fixed-Ended Moments
2	Balance Joints
3	Carry over
4	$\Sigma H = 0$ (Balance Column Moments)
5	$\Sigma M = 0$ (Balance Joints)
6	Carry over
7	$\Sigma H = 0$
8	$\Sigma M = 0$
9	Carry over
10	$\Sigma H = 0$
11	$\Sigma M = 0$
12	Carry Over

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 COMPUTATIONS OF BENT MOMENTS  
 HARDY CROSS METHOD  
 BUILDING 20 story bent shown in Bull. 80, Univ. Ill.  
 BENT Dist. of Moments due to Column shortening under horiz. load  
 BY M. P. White DATE