

Assignment #7**Problem:**

Find out the BMD, SFD & time periods of vibration for different modes for the 3-D frame system shown in **Figure**. For all members, consider, $E = 29000$ Ksi, sections and loading are as shown below,

Story	Columns	Girders	Floor mass (Kip-s ² /in)	Distributed load on Girders(K/ft)
1	W14X370	W36X160	2.828	1.06
2	W14X283	W36X135	3.047	1

Please note the following important instructions,

- 1) Consider rigid floor diaphragm effect at each floor.
- 2) Floor masses are acting @ eccentricities of 10% (to the overall width) in the Y direction.

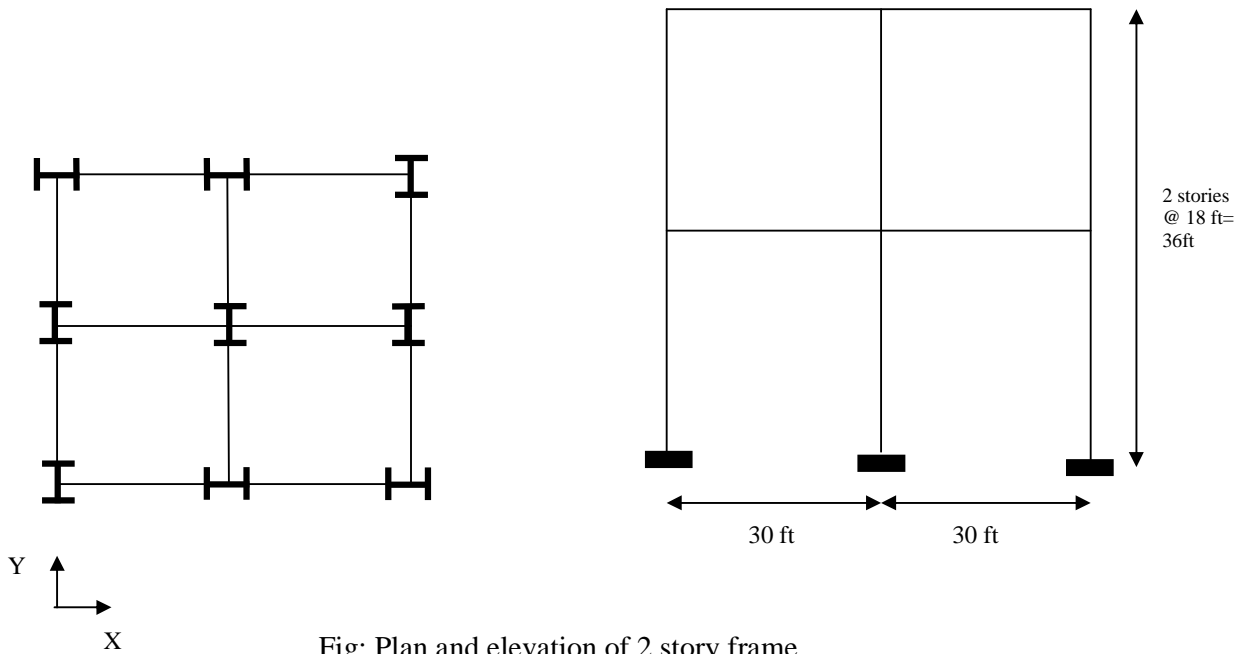


Fig: Plan and elevation of 2 story frame