

Approximate Analysis

Q.1

Find (a) the beam moments (b) the beam shears (c) the column axial forces (d) column moments, and (e) column shears for the building frames shown in Figs.1 and 2 respectively. The roof load is 15kN/m and the floor load is 30kN/m in each case.

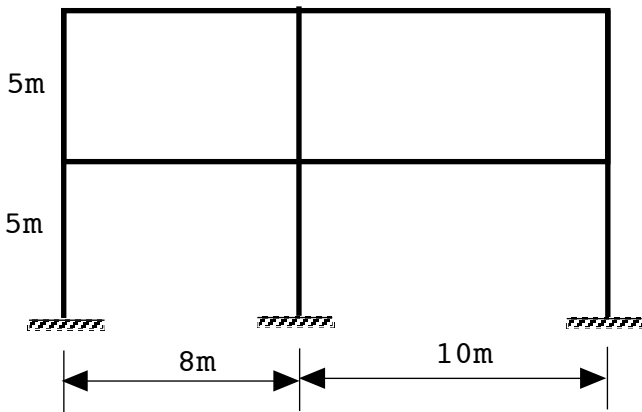


Fig.1

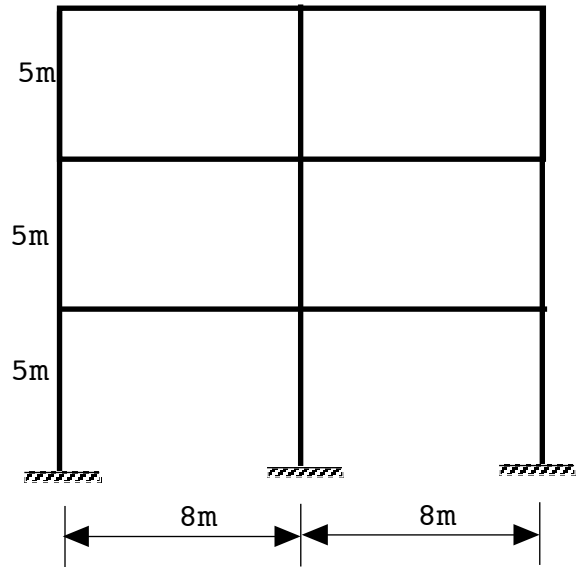


Fig.2

Q.2

Find (a) the beam moments (b) the beam shears (c) the column axial forces (d) column moments, and (e) column shears for the building frames shown in Figs.3 and 4 respectively. The frames are subjected to the lateral loads as shown in the diagrams.

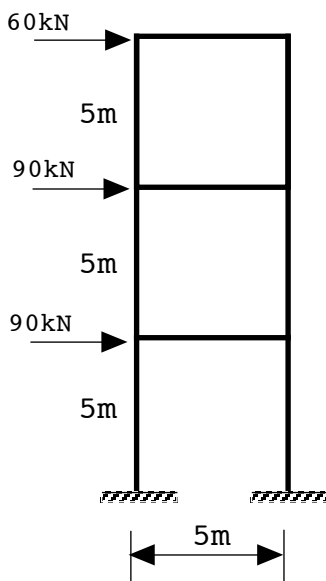


Fig.3

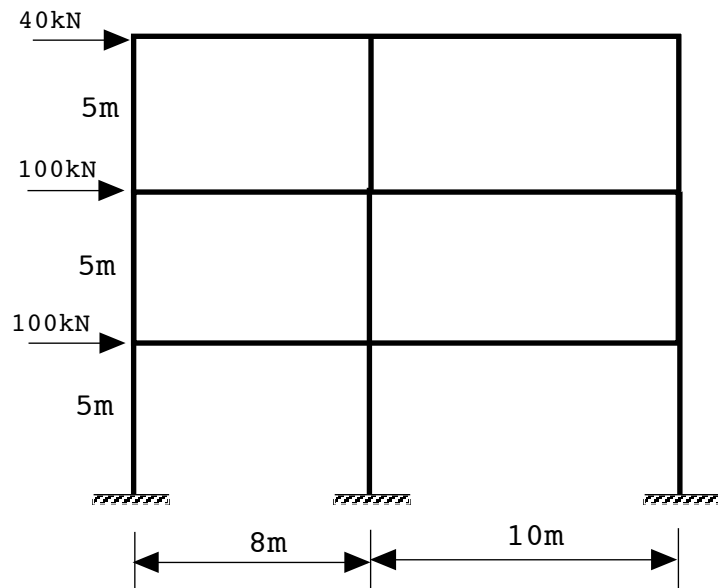


Fig.4