Determine the displacement components of various nodes in the following problems. You may use a computer to solve the resulting algebraic equations.

1) \( P_1 = 8 \text{ kips} \)
\( P_2 = 8 \text{ kips} \)
\( E = 30 \times 10^6 \text{ psi, } v = 0.3 \)
\( A = 3.0 \text{ in}^2 \)

2) \( P_1 = 9 \text{ kips} \)
\( P_2 = 19 \text{ kips} \)
\( E = 30 \times 10^6 \text{ psi, } v = 0.3 \)
\( A_1 = A_5 = A_9 = 5 \text{ in}^2 \)
\( A_2 = A_4 = A_6 = A_8 = 6 \text{ in}^2 \)
\( A_3 = A_7 = 2 \text{ in}^2 \)

3) \( E=10^{11} \text{ Pa, Area}=0.01 \text{ m}^2, F=1000 \text{N, L}=2\text{m} \)
4) \( E=10^{11} \text{ Pa}, \text{ Area}=0.01 \text{ m}^2, \text{ F}=1000 \text{ N}, \text{ L}=2 \text{ m} \)