## Homework \#4

Note: Show values on the diagrams

## Problem 1

a) Draw the influence lines for $\mathrm{B}_{\mathrm{y}}, \mathrm{D}_{\mathrm{y}}, \mathrm{V}_{\mathrm{C}}, \& \mathrm{M}_{\mathrm{C}}$ using the equation method
b) Verify all results using the Müller-Breslau principle (show how all values are found without using the equations calculated in part a)
c) Using the influence line diagrams, determine the values of $\mathrm{B}_{\mathrm{y}}, \mathrm{D}_{\mathrm{y}}, \mathrm{V}_{\mathrm{C}}$, \& $\mathrm{M}_{\mathrm{C}}$ caused by a downward force of 2 kip located at point A and a distributed load of $0.8 \mathrm{k} / \mathrm{ft}$ spanning from A to D


## Problem 2

a) Draw the influence lines for $\mathrm{A}_{\mathrm{y}}, \mathrm{D}_{\mathrm{y}}, \mathrm{M}_{\mathrm{A}}, \mathrm{V}_{\mathrm{C}}, \& \mathrm{M}_{\mathrm{C}}$ using the equation method
b) Verify all results using the Müller-Breslau principle (show how all values are found without using the equations calculated in part a)
c) Using the influence line diagrams, determine the values of $\mathrm{A}_{\mathrm{y}}, \mathrm{D}_{\mathrm{y}}, \mathrm{M}_{\mathrm{A}}, \mathrm{V}_{\mathrm{C}}, \& \mathrm{M}_{\mathrm{C}}$ caused by a downward force of 5 kip located at point E and a distributed load of $0.5 \mathrm{k} / \mathrm{ft}$ spanning from A to D


