M8 Concept Question 1

Two beams, are loaded, one by a symmetric distributed load, the other by a symmetric set of discrete loads. The bending moments at the center of the beam (the locations where the bending moments are a maximum) are the same. Which of the following statements are true:

A: The curvatures at the center of the beams will be the same.

B: The axial stresses at the center of the beams will be the same

C: The deflection of the center of the beams will be the same

1. A only
2. B only
3. C only
4. A and B
5. B and C
6. A and C
7. A, B and C
8. None of them
9. I do not know/I do not understand..

M8 Concept Question 2

In order to solve for the stresses and deflections of the statically indeterminate beam shown on the board the most straightforward superposition approach is to superimpose solutions for:
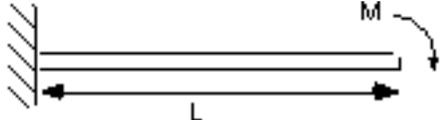
1. and
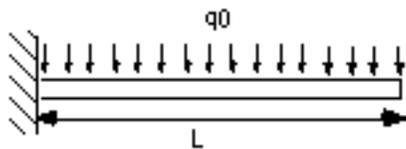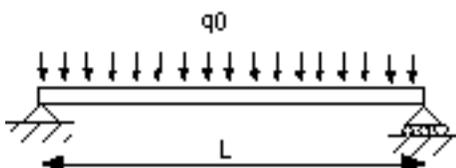
2. and
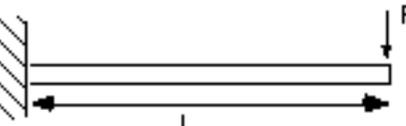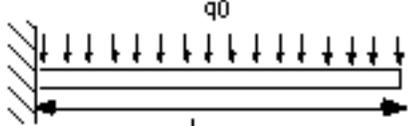
3. and
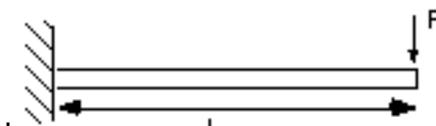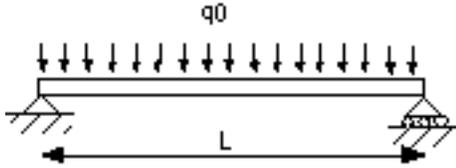
4. and
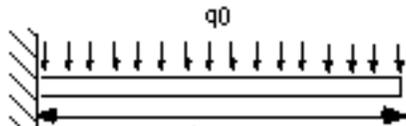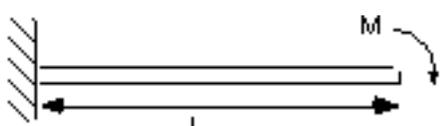
5. and
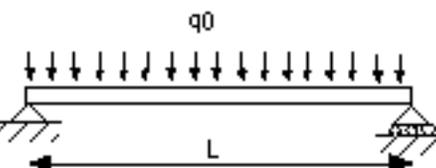
6. Some other answer

7. Do not know/do not understand