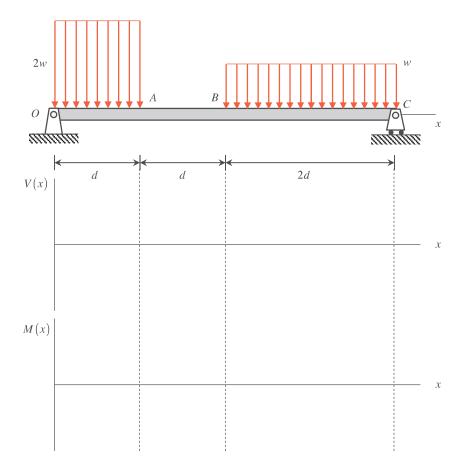
Homework H35.A

Given: Consider the beam loaded as shown below. The beam has a solid circular cross section with a radius of R.

Find: For this problem:

- a) Determine the location(s) for which pure bending exists on the cross section of the beam.
- b) For the location(s) found in a) above, determine the maximum normal stress. For this problem, use the following parameters: d = 4 ft, w = 10 kips/ft and R = 3 in.



Homework H35.B

Given: Consider the beam loaded as shown below. The beam has a solid square cross section with cross-section dimensions $b \times b$.

Find: For this problem:

- a) Determine the location(s) for which pure bending exists on the cross section of the beam.
- b) For the location(s) found in a) above, determine the maximum normal stress. For this problem, use the following parameters: d = 2 m, w = 10 kN/m and b = 100 mm.

