

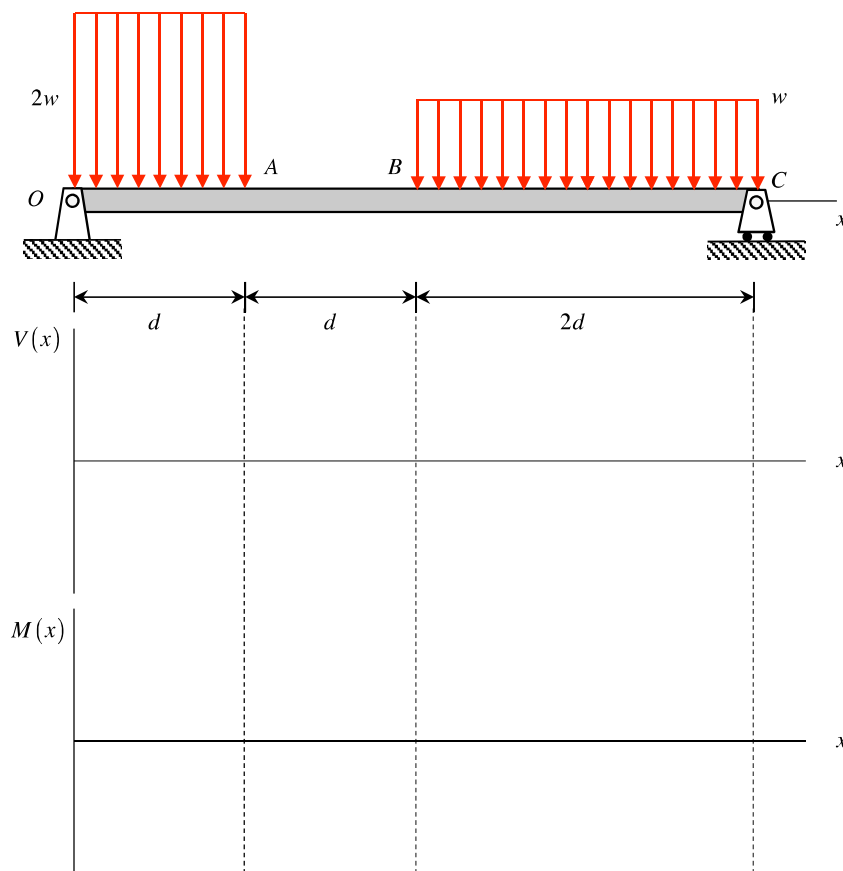
Homework Problem H36.A

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:

- c) Determine the location(s) for which pure bending exists on the cross section of the beam.
- d) 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 Problem H36.B

Given: Consider the beam loaded as shown below. The beam has a rectangular cross section with cross-section dimensions of $b \times h$, where b is the dimension into the page.

Find: For this problem:

- Determine the location(s) for which pure bending exists on the cross section of the beam.
- For the location(s) found in a) above, determine the maximum normal stress.

For this problem, use the following parameters: $d = 1$ m, $P = 10$ kN, $w = 30$ kN/m, $b = 0.3$ m and $h = 0.3$ m.

