

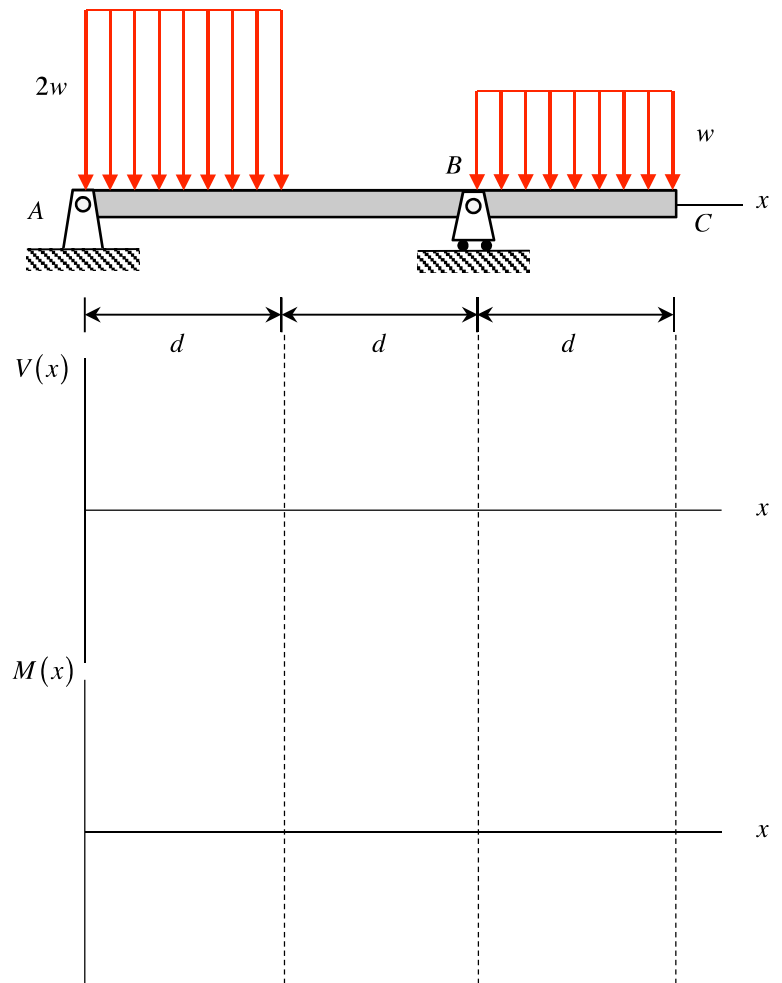
Homework H36.A

Given: Consider the beam loaded as shown below. The beam has a tubular cross section with inner and outer radii of $R/2$ and R , respectively.

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: $d = 3$ ft, $w = 15$ kips/ft and $R = 4$ in.



Homework 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: $L = 5$ m, $w = 20$ kN/m, $b = 0.1$ m and $h = 0.3$ m.

