

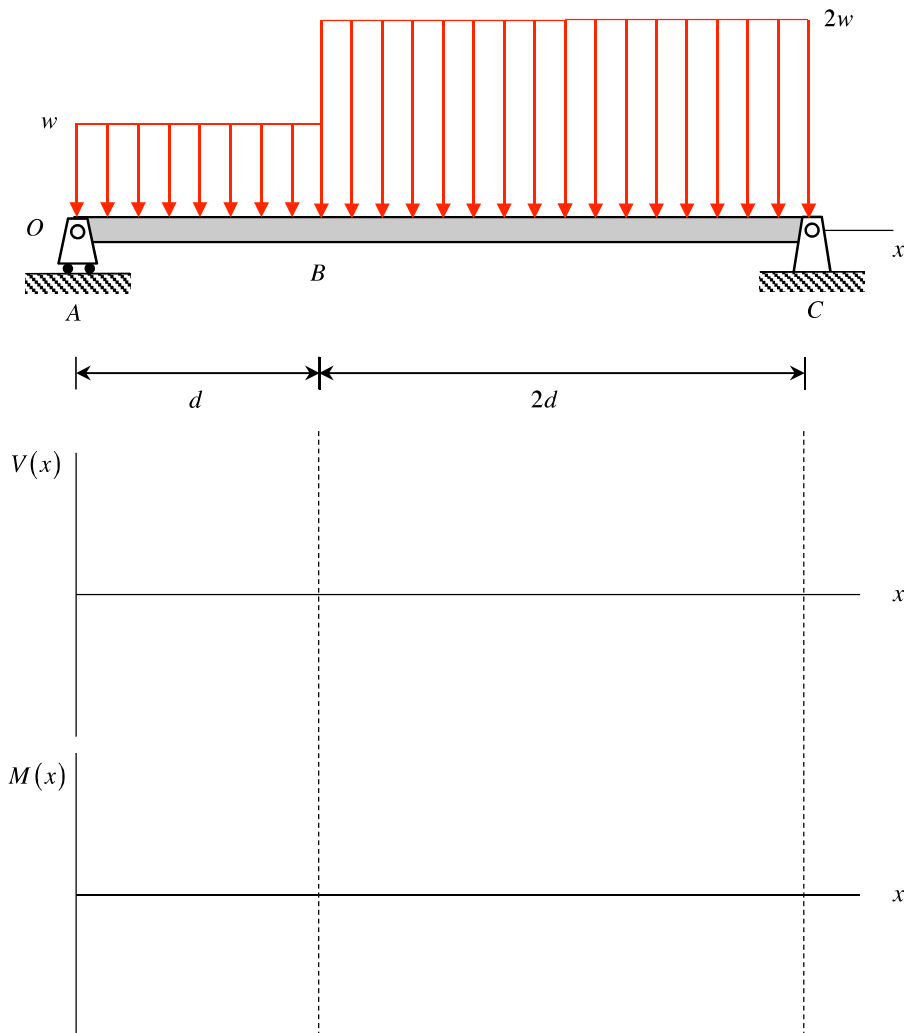
Homework Problem H35.A

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: $d = 6$ ft, $w = 4$ kips/ft, $b = 2$ ft and $h = 4$ ft.



Homework Problem 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:

- 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: $d = 2$ m, $w = 10$ kN/m and $b = 100$ mm.

