

0

$$\frac{d^2}{dx^2} \left(EI \frac{d^2 w}{dx^2} \right) = q$$

What is this equation, who developed it and when ?

Why is it important ?



Who are these two 18th Century Swiss Mathematicians ?



Leonard Euler 1707
- 1783

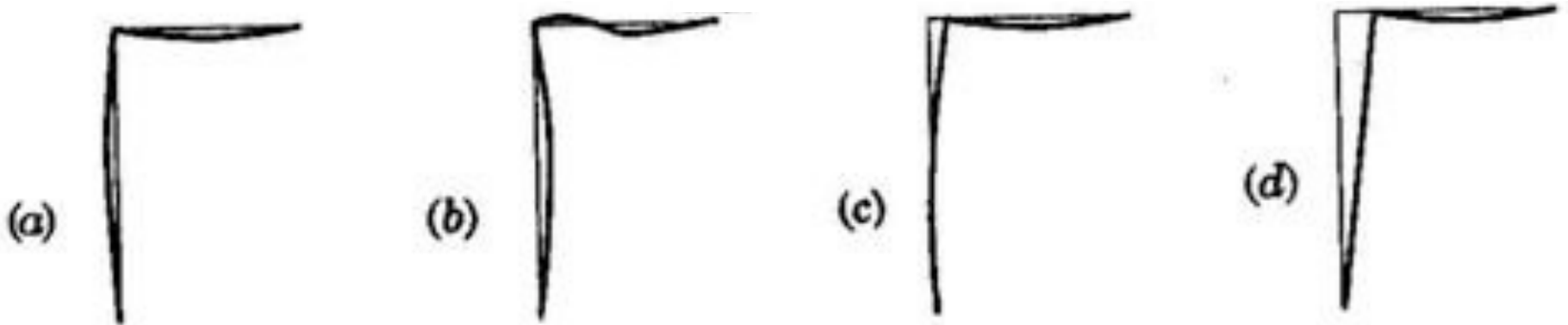
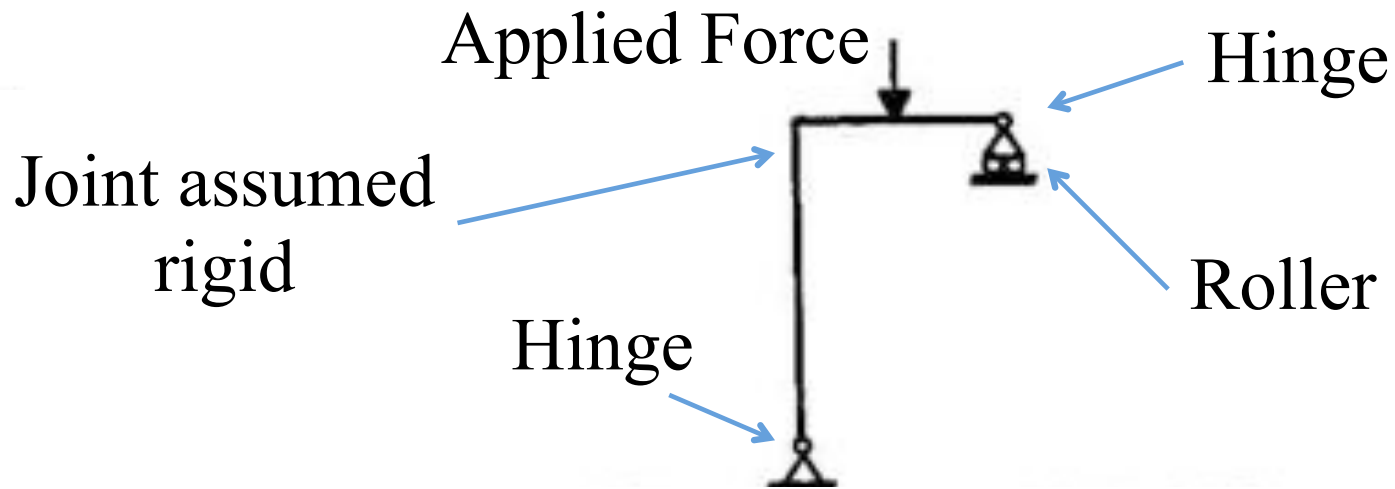


Daniel Bernoulli
1700 - 1782

The Euler Bernoulli Beam Theory 1750



Eiffel Tower under construction 1887-1889



How does this structure deform ?
 Is the correct deflected shape (a), (b), (c) or (d)