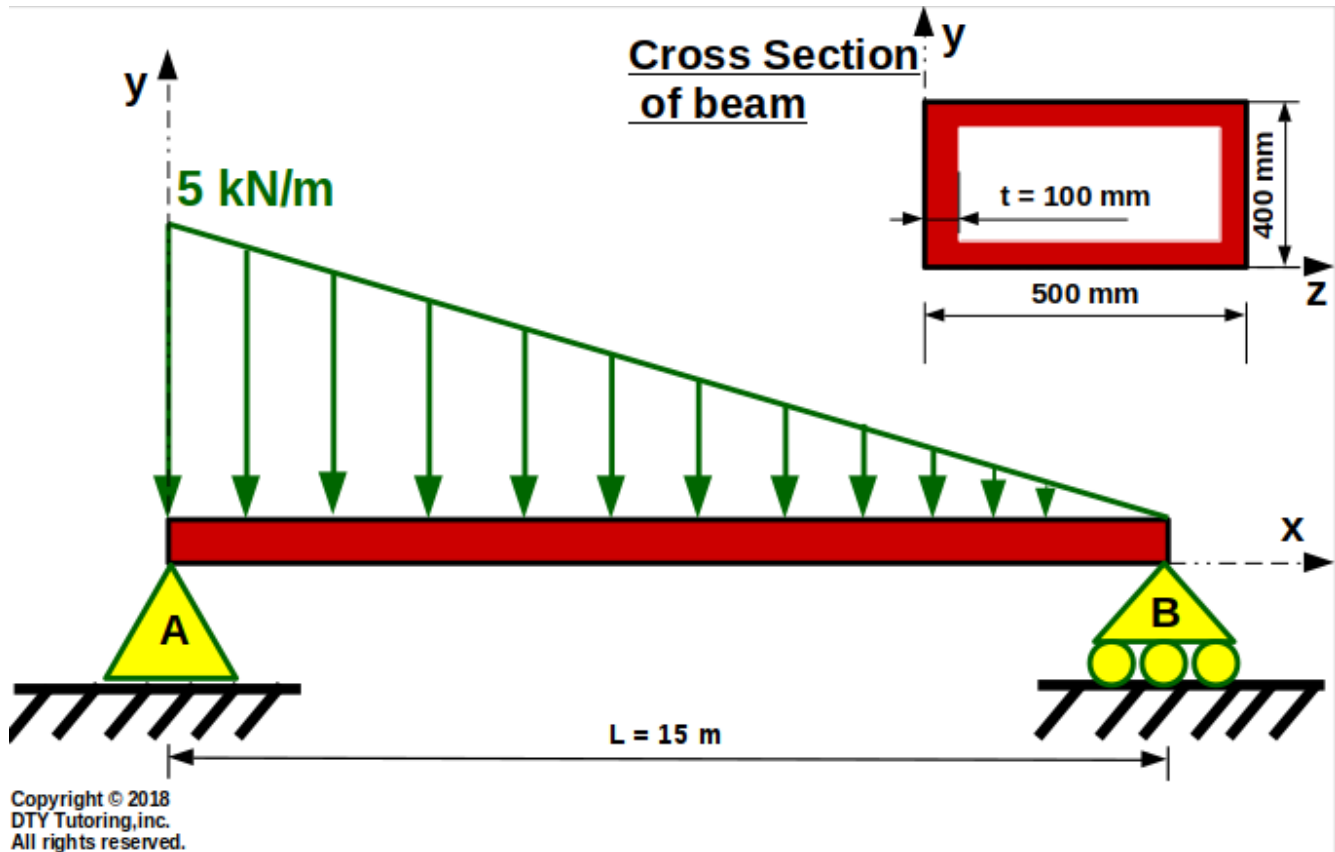


Date: 10th October 2018

This simply supported beam is supported by a pin at A , a roller at B, and has a triangular distributed load acting throughout the entire span. Cross-section dimensions of the beam is given. Compute the maximum flexural tensile and compressive stresses.



Answers (refer to solutions for detail)

$$\sigma_{\text{MAX}(C)} = \sigma_{\text{MAX}(T)} = 5,851 \text{ ksi}$$