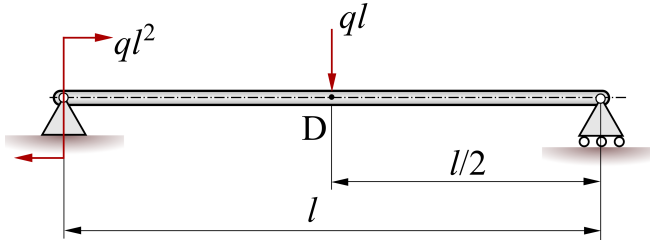


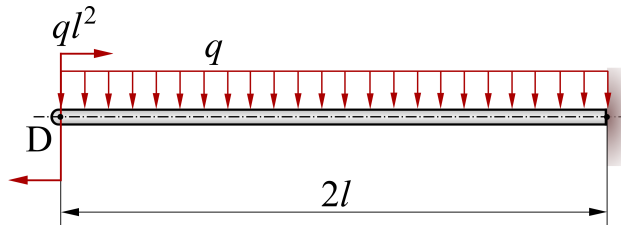
Strength of Mechanical Constructions Castigliano's Theorem – examples

The beams shown below have the cross-section A , second moment I and are made of material characterised by the Young modulus E . Parameter of length l as well as the load q are known. For particular beam:

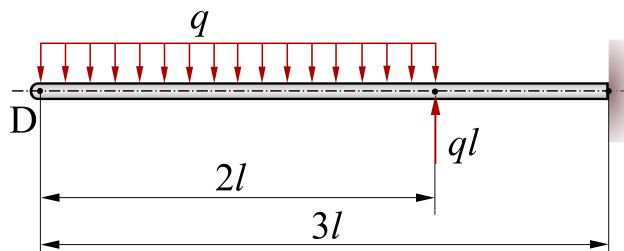
a) determine the vertical displacement at point D



b) determine the slope (angle of rotation) at point D



c) determine the vertical displacement and the slope at point D



d) determine the reaction at point D

