The two wires are connected together at A. If the force P causes point A to be displaced horizontally 2 mm, determine the normal strain developed in each wire.



The piece of rubber is originally rectangular. Determine the average shear strain γ_{xy} at A if the 3 mm-corners B and D are subjected to the displacements that cause the rubber to distort as shown by the dashed lines.



Part of a control linkage for an airplane consists of a rigid member CBD and a flexible cable AB. If a force is applied to the end D of the member and causes a normal strain in the cable of 0.0035 mm/mm, determine the displacement of point D. Originally the cable is unstretched.



The triangular plate is fixed at its base, and its apex A is given a horizontal displacement of 5 mm. Determine the shear strain γ_{xy} at A.

