

HOMEWORK - CHAPTER 12

••28 In the figure to the right, a thin horizontal bar AB of negligible weight and length L is hinged to a vertical wall at A and supported at B by a thin wire BC that makes an angle θ with the horizontal. A block of weight W can be moved anywhere along the bar; its position is defined by the distance x from the wall to its center of mass. As a function of x , find (a) the tension in the wire, and the (b) horizontal and (c) vertical components of the force on the bar from the hinge at A .

