A 2.90 m-long, 390. kg steel beam extends horizontally from the point where it has been bolted to the framework of a new building under construction. A 71.0 kg construction worker stands at the far end of the beam. What is the magnitude of the torque about the point where the beam is bolted into place?

The sum of the torque is T1+T2, and the person is standing at the edge of the beam. I do know the torque of the person standing at the edge, which is 2.90 m * 71.0 kg * 9.8 m/s^2 = 2.02 x 10^3 N-m. Your steel beam, assuming that it is uniform in mass, should have its downward force exactly in the middle. Think of the steel beam as a point particle, and all the mass is focused at its center. The product of its weight and one-half its length will give you its torque. And the person is standing at the edge at that distance, there is another downward force there. Then sum up all the torques. The torque of the beam is mgl/2.