Translational Acceleration in Terms of Rotational Acceleration.

The mass hanger and mass will fall at a rate less than the acceleration due to gravity. In terms of the variables listed below, determine acceleration of the mass hanger.

On the following diagram, label the positions of the following variables:
Mass 1 (m_1)
Radius 1 (r_1)
Radius 2 (r_2)
Mass 2 (m_2)
Angular Acceleration (α)
Translational Acceleration (a)