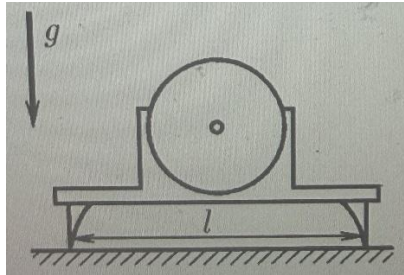


Problems.

1. An electric motor is fixed on a stand in such a way that its axis and the common center of mass are located midway between the supports, the distance between which is equal to l . The stand is placed on a smooth horizontal surface. Find the forces of pressure exerted by the supports of the stand on the surface if, after the motor is switched on, the rotor spins up with angular acceleration β , and its moment of inertia is J . The mass of the motor together with the stand is m .



2. A wooden block of mass m is pressed against the vertical wall with a force, applied to the center of the brick at an angle α to the vertical (see image below). The friction coefficient between the block and the wall is μ . The brick is at rest. Find the force magnitude range.

