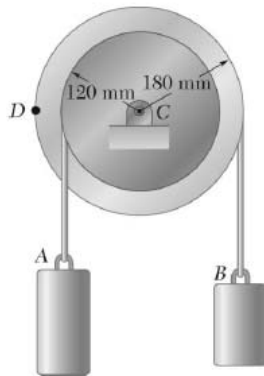


1)



A pulley and two loads are connected by inextensible cords as shown. Load *A* has a constant acceleration of 300 mm/s^2 and an initial velocity of 240 mm/s , both directed upward. Determine (a) the number of revolutions executed by the pulley in 3 s, (b) the velocity and position of load *B* after 3 s, (c) the acceleration of Point *D* on the rim of the pulley at $t = 0$.