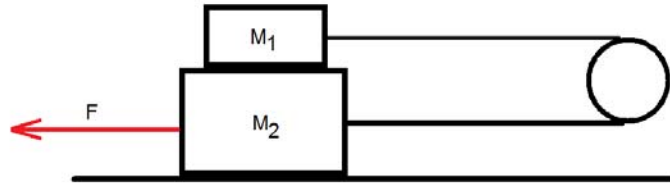


4-6)

Block One has a mass of  $M_1 = 14 \text{ kg}$  and Block Two has a mass  $M_2 = 42 \text{ kg}$ . Block One sits atop Block Two, which in turn is on a table. The blocks are connected by a light string that passes over a massless, frictionless wheel, as shown (the string is otherwise horizontal).



The co-efficients of friction between One and Two, and Two and the table, are both 0.3. What force  $F$  must be applied to cause the blocks to move with constant velocities?