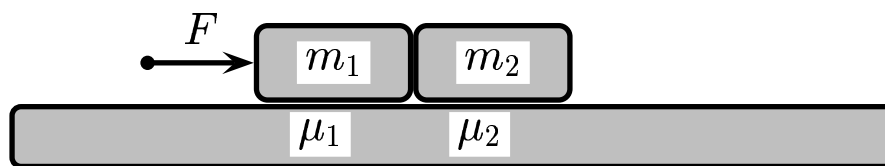


Denote the force exerted on block 2 by the block 1 to be F_{21} .



If the acceleration is a , the equation of motion for block m_2 is given by

- A) $F - \mu_1 m_1 g - \mu_2 m_2 g = m_2 a .$
- B) $F_{21} - \mu_2 m_2 g = m_2 a .$
- C) $F + F_{21} - \mu_2 m_2 g = m_2 a .$
- D) $F - F_{21} - \mu_2 m_2 g = m_2 a .$
- E) $F_{21} - \mu - 1 m_1 g - \mu_2 m_2 g = m_2 a .$

The net force F_{net} on block 2 is $F_{21} - \mu_2 m_2 g$.
Since $F_{net} = m a$, we have $F_{21} - \mu_2 m_2 g = m_2 a$.
Answer **B**.