

- 4 Two objects, A and B, are connected via a light string that runs over a smooth pulley.

Their masses are m_A and m_B respectively.

The diagram shows A moving up with velocity v_A and B moving down with velocity v_B .

Which statement is incorrect?

- A If $m_A = m_B$, v_A and v_B are of the same magnitude.
- B If $m_A = m_B$, v_A and v_B can only be zero.
- C m_A can be larger than m_B .
- D m_A can be smaller than m_B .

