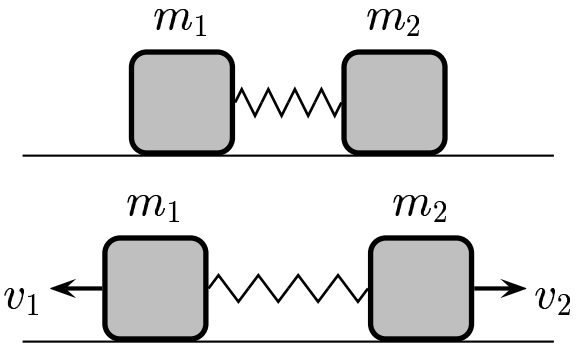
Consider two masses, $m_2 = 2\,m_1$. They are pressed together against a spring.



When the two masses are released, find $\dfrac{v_2}{v_1}$.

A) $\dfrac{v_2}{v_1} = \dfrac{1}{2}$.

B) $\dfrac{v_2}{v_1} = 1$.

C) $\dfrac{v_2}{v_1} = 2$.

D) $\dfrac{v_2}{v_1} = 4$.

From conservation of momentum, we have $p_1 = p_2$ or $m_1 v_1 = m_2 v_2$,

therefore, $\dfrac{v_2}{v_1} = \dfrac{m_1}{m_2} = \dfrac{1}{2}$.

Answer **A**.

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