68. The velocity of the first particle (of mass $m_1 = 3.0$ kg) is $\vec{v}_1 = -6.0\,\hat{j}$ m/s while that of the second one (of mass $m_2 = 4.0$ kg) is $\vec{v}_2 = 7.0\,\hat{i}$ m/s. The center-of-mass velocity is then

$$\vec{v}_{\text{com}} = \frac{m_1\vec{v}_1 + m_2\vec{v}_2}{m_1 + m_2} = \frac{(3.0)(-6.0\,\hat{j}) + (4.0)(7.0\,\hat{i})}{3.0 + 4.0} = -2.6\,\hat{i} + 4.0\,\hat{j}$$

in SI units. The corresponding speed is

$$v_{\text{com}} = \sqrt{v_x^2 + v_y^2} = \sqrt{(-2.6)^2 + (4.0)^2} = 4.8 \text{ m/s} .$$