$k = 5.00 \times 10^6$ N/m

$m = 1000$ kg

$x = .0316$ m

$KE_1 = \frac{1}{2} m v_1^2 \qquad KE_2 = 0$

$PE_{S_1} = 0 \qquad PE_{S_2} = \frac{1}{2} \cdot k \cdot x^2$

$KE_1 + PE_{S_1} = KE_2 + PE_{S_2}$

$\frac{1}{2} \cdot m \cdot v_1^2 + 0 = 0 + \frac{1}{2} \cdot k \cdot x^2$

$\frac{1}{2}(1000 \text{ kg}) \cdot v_1^2 = \frac{1}{2}(5.00 \times 10^6 \text{ N/m})(.0316 \text{ m})^2$

$$\boxed{v_1 = 2.23 \text{ m/s}}$$