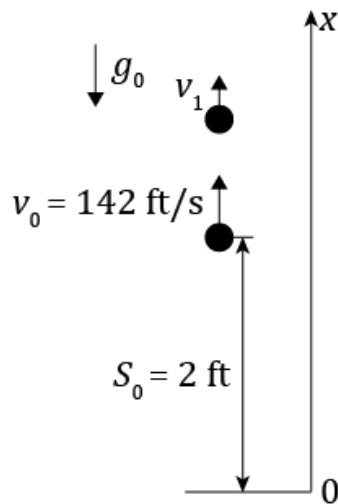


Answer on Question #42144 - Math - Algebra

A ball is thrown straight up into the air with an initial velocity of 142 feet per second and an initial height of 2 feet. What is the velocity of the ball after 4 seconds?

Solution. The standard acceleration due to free fall equals $g_0 = 32,2 \text{ ft/s}^2$. The velocity equals $v = v_0 - g_0 t$. Hence the velocity of the ball after 4 seconds equals

$$v_1 = v_0 - g_0 t_1 = 142 - 32,2 \cdot 4 = 13,2 \text{ ft/s.}$$



Answer: $v_1 = 13,2 \text{ ft/s}$.