

Question 15461

We are given, $p_0, p_1 = 1.2 p_0$. One knows, that kinetic energy is given by $T = \frac{m v^2}{2} = \frac{p^2}{2m}$.

Hence, $\frac{T_1}{T_0} = \frac{p_1^2}{p_0^2} = (1.2)^2 = 1.44$, so the kinetic energy increases by 44 %.