## Answer on Question #63587, Physics / Other

Bullet B has twice the mass of bullet A. Both are fired so that they have the same speed. If the kinetic energy of bullet A is KE, the kinetic energy of bullet B is

**Solution:**

Let "m" be the mass of bullet A.

That means the mass of bullet B is "2m".

KE of bullet A is

$$KE_A = \frac{1}{2}mv^2 = KE$$

KE of bullet B is

$$KE_B = \frac{1}{2}(2m)v^2 = 2\left(\frac{1}{2}mv^2\right) = 2KE$$

**Answer:** $2KE$