

Physics 10154 - Quiz 7C

A 150 gram block is at rest on the edge of a table, 85.0 cm above the ground. A 6.54-gram bullet is fired into the block and embeds itself into the block. The bullet-block system flies horizontally off the table, and after a short period in free-fall, lands 1.44 meters horizontally away from the table.

What was the initial speed of the bullet prior to the collision?