1. Julietta and Jackson are playing miniature golf. Julietta's ball rolls into a long. straight upward incline with a speed of 2.95 m/s and accelerates at -0.876 m/s/s for 1.54 seconds until it reaches the top of the incline and then continues along an elevated section. Determine the length of the incline.
2. Rickey Henderson, baseball's record holder for stolen bases, approaches third base. He dives head first, hitting the ground at 6.75 m/s and reaching the base at 5.91 m/s, accelerating at -5.11 m/s/s. Determine the distance Rickey slides across the ground before touching the base.

1. Win Blonehare and Kent Swimtashore are sailboating in Lake Gustastorm. Starting from rest near the shore, they accelerate with a uniform acceleration of 0.29 m/s/s, How far are they from the shore after 18 seconds?
2. For years, the tallest tower in the United States was the Phoenix Shot Tower in Baltimore, Maryland. The shot tower was used from 1828 to1892 to make lead shot for pistols and rifles and molded shot for cannons and other instruments of warfare. Molten lead was dropped from the top of the 234-foot (71.3 meter) tall tower into a vat of water. During its free fall, the lead would form a perfectly spherical droplet and solidify. Determine the time of fall and the speed of a lead shot upon hitting the water at the bottom.
3. According to Guinness, the tallest man to have ever lived was Robert Pershing Wadlow of Alton, Illinois. He was last measured in 1940 to be 2.72 meters tall (8 feet, 11 inches). Determine the speed which a quarter would have reached before contact with the ground if dropped from rest from the top of his head.
4. A California Condor is approaching its nest with a large chunk of carrion in its beak. As it approaches, it makes an upward swoop, achieving a momentary upward velocity of 12.8 m/s when the carrion falls from its mouth, hitting a cliff outcropping 32.1 m below. Determine the speed of the carrion upon hitting the outcropping.
5. During his recent skydiving adventure, Luke Autbeloe had reached a terminal speed of 10.4 m/s as he approached the ground with his parachute. During an attempt to snap one last photo with his camera, Luke fumbled it from a height of 52.1 m above the ground. Find the time it took for the camera to hit the ground, and it’s velocity upon impact.