Classical mechanics remains the oldest branch of physics. Indeed, it is so old that fundamental concepts of inertia and forces is ingrained in our culture. Despite this not everyone has a solid grasp on what seems to be fundamental or simple, these questions are meant to tax your understanding. Enjoy!

1 Classical Mechanics

1.1 Does it stop?

Consider ideal conditions¹ in which there is a hard ball rolling without slipping on a floor with friction. This floor is infinite in extent, and there is a gravitational force pulling the ball to the ground at constant magnitude, does the ball ever stop? or does it roll forever?

Credit: Physics Problems to Challenge Understanding

1.2 Another Question by Some Ambitious Fellow

Nothing yet!

 $^{^{-1}}$ No wind resistance, every shape is geometrically perfect to within precision limited by nature.