this is some preface text

1 Classical Mechanics

1.1 Does it stop?

Consider ideal conditions[1] 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? nothing yet

[1] No wind resistance, every shape is geometrically perfect to within precision limited by nature.