Adhesive and gravitational force being the reason of raindrops behavior on window grills

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Abstract-In this article we are going to see the behavior of raindrop on a window grill which falls after some time and how adhesive and gravitational force explains the same.

Theory-Initially when raindrops are attached to grills, the contact between grill and water droplet will be more which will result into more adhesive force and at the initial stage this force will be more than that of gravitational force which that drop will will face. But as time passes, in order to decrease the surface tension, it tends to form a spherical shape, which will result in the decrease in contact between the drop and the surface of grill. As a result at some instant the gravitational force will be more dominant than that of adhesive force which will in turn result into permanent loose of contact with the surface and the drop will fall.

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