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2. One end of a light elastic spring, of natural length l and modulus of elasticity $2mg$, is attached to a particle of mass m. The other end of the spring is attached to a fixed point A on a rough horizontal plane. The particle is held at a point B on the plane, where $AB = 1.25l$, and released from rest. The particle first comes to instantaneous rest at the point C on the plane, where $AC = 0.9l$.

Find the coefficient of friction between the particle and the plane.

(6)

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Question 2 continued

Q2

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