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J#:	Team:

Take-Home Exercise

Standard: AM	Assigned: 09-28	Due: 10-02	Mark:
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Available to students with credit for C2 by 09-28.

A water droplet with a radius of $89 \mu\text{m}$ has a mass of about $6.1 \times 10^{-12}\text{kg}$ and a terminal velocity of $71 \frac{\text{cm}}{\text{s}}$. This droplet is dropped from rest.

Give an initial value problem (IVP) modeling this scenario, then use it to calculate the velocity of the object after 0.12 seconds. Assume acceleration due to gravity is 9.8m/s^2