#### 1

# Challenging question 5

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Download latex-tikz codes from

https://github.com/adhvik24/EE3900/blob/main/ Assignment 1/Assignment 1.tex

## 1 QUESTION 2.17.A

Give the magnitude and direction of the net force acting on a stone of mass 0.1 kg,just after it is dropped from the window of a stationary train.

### 2 SOLUTION

As the train is stationary, the only force acting on the mass is gravitational force.

The direction of force is  $\begin{pmatrix} 0 \\ -1 \\ 0 \end{pmatrix}$ .

And the magnitude is 1N.  $(Taking, g = 10ms^{-2})$