

# EE3900 Assignment - 1

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Download latex-tikz codes from

[https://github.com/adhvik24/EE3900/blob/main/Assignment\\_1/Assignment\\_1.tex](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 net force is  $\begin{pmatrix} 0 \\ -1 \\ 0 \end{pmatrix}$ .

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