Give one example of each of the following type of physical quantity:

(i) Dimensionless constant: coupling constant for the electromagnetic interaction $\alpha \approx \frac{1}{137.036}$

(ii) Dimensional constant: speed of light $c \approx 3 \cdot 10^8$ m/s

(iii) Dimensionless variable: atomic weight which is the ratio of the average mass of the atom to the $\frac{1}{12}$ of the mass of an atom of ¹²C in its ground state.

(iv) Dimensional variable: force is measured in the SI unit of newtons and represented by the symbol F.

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