



Unit of Derive Quantities

Exercises – Conversion of the Unit of Speed, Density and Pressure

Complete the following unit conversion of speed.

$$90 \text{ kmh}^{-1} = \underline{\hspace{2cm}} \text{ ms}^{-1}$$

$$110 \text{ kmh}^{-1} = \underline{\hspace{2cm}} \text{ ms}^{-1}$$

$$1.3 \text{ ms}^{-1} = \underline{\hspace{2cm}} \text{ kmh}^{-1}$$

$$8.12 \text{ ms}^{-1} = \underline{\hspace{2cm}} \text{ kmh}^{-1}$$

Complete the following unit conversion of density and pressure.

$$760 \text{ kgm}^{-3} = \underline{\hspace{2cm}} \text{ gcm}^{-3}$$

$$12000 \text{ kgm}^{-3} = \underline{\hspace{2cm}} \text{ gcm}^{-3}$$

$$5.1 \text{ gcm}^{-3} = \underline{\hspace{2cm}} \text{ kgm}^{-3}$$

$$3600 \text{ Nm}^{-2} = \underline{\hspace{2cm}} \text{ Ncm}^{-2}$$

$$12 \times 10^6 \text{ Nm}^{-2} = \underline{\hspace{2cm}} \text{ Ncm}^{-2}$$

$$1.5 \times 10^3 \text{ Nm}^{-2} = \underline{\hspace{2cm}} \text{ Ncm}^{-2}$$

$$3.16 \times 10^{-5} \text{ Ncm}^{-2} = \underline{\hspace{2cm}} \text{ Nm}^{-2}$$

$$7.1 \times 10^{-3} \text{ Ncm}^{-2} = \underline{\hspace{2cm}} \text{ Nm}^{-2}$$