
8. We have

$$ML^2T^{-3} = (ML^{-3})^a (T^{-1})^b (L)^c = M^a L^{-3a+c} T^{-b}$$

Equating coefficients:

$$M \quad 1 = a$$

$$L \quad 2 = -3a + c$$

$$T \quad -3 = -b$$

Hence $a = 1$, $b = 3$ and $c = 5$ and so $P = \text{K}\rho\text{n}^3\text{D}^5$
