

- 4 A cylindrical tube rolling down a slope of inclination θ moves a distance L in time T . The equation relating these quantities is

$$L \left(3 + \frac{a^2}{P} \right) = QT^2 \sin \theta$$

Where a is the internal radius of the tube and P and Q are constants.

Which line gives the correct units for P and Q ?

	P	Q
A	m^2	m^2s^{-2}
B	m^2	m s^{-2}
C	m^2	m^3s^{-2}
D	m^3	ms^{-2}

Space for working