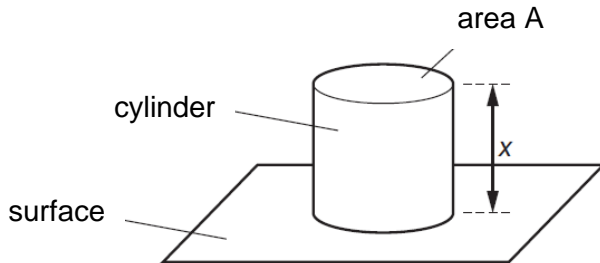


- 8 A solid metal cylinder stands on a horizontal surface, as shown.



The cylinder has length x and cross-sectional area A . The cylinder exerts a pressure p on the surface. The acceleration of free fall is g .

Which expression gives the density of the metal of the cylinder?

A $\frac{gx}{pA}$

B $\frac{pA}{gx}$

C $\frac{gx}{p}$

D $\frac{p}{gx}$