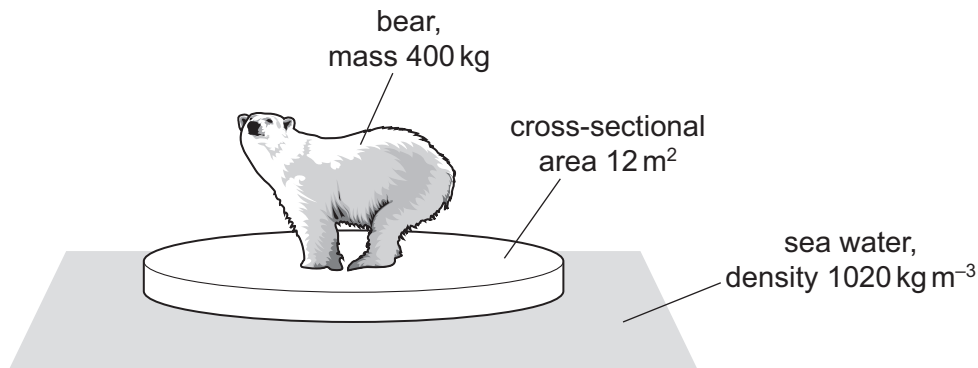


15 A cylindrical block of ice of cross-sectional area 12 m^2 is floating, partially submerged, in the sea.

The density of the sea water is 1020 kg m^{-3} . A polar bear of mass 400 kg steps onto the block of ice.



The block of ice sinks a vertical distance d .

What is the value of d ?

A 3.3 mm

B 3.3 cm

C 0.32 m

D 3.1 m