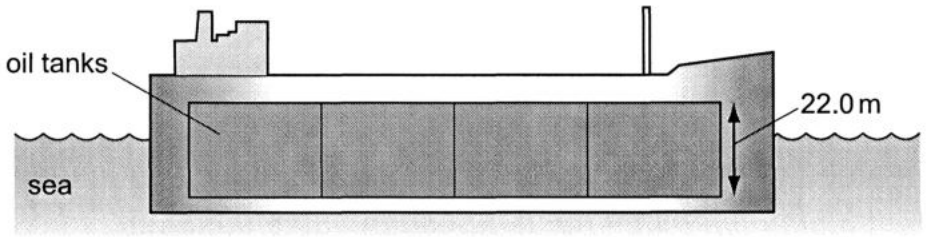
10 An oil tanker, with vertical sides, has an external cross-sectional area of 36 500 m^2 in the plane of the sea.



The tanker carries oil of density 930 kg m^{-3} in its tanks, which have a constant cross-sectional area of 34 000 m^2 and depth 22.0 m. Sea water has density 1030 kg m^{-3}.

By how much does the tanker rise in the water when it unloads its oil?

A 26.2 m **B** 22.7 m **C** 21.3 m **D** 18.5 m