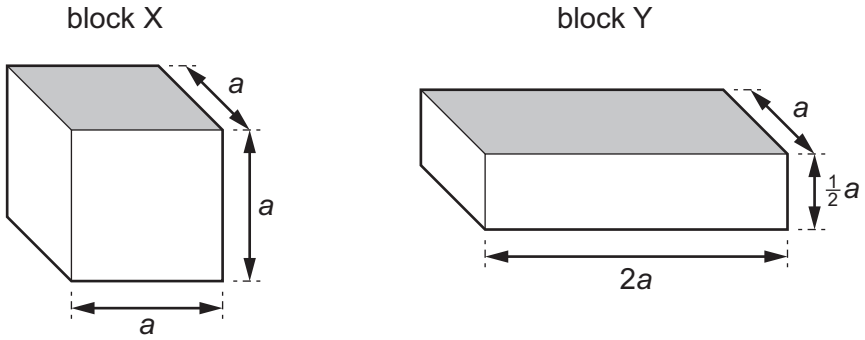
15 The diagram shows two blocks X and Y.



Block X has sides of length *a*. When block X is placed in a liquid of density ρ with the shaded face level with the liquid surface, it experiences an upthrust *U*.

Block Y has horizontal sides of length *a* and 2*a* and height $\frac{1}{2}a$. Block Y is placed in a liquid of density 2ρ, also with the shaded face level with the liquid surface.

What is the upthrust on block Y?

A $\frac{1}{2}U$ **B** U **C** $2U$ **D** $4U$