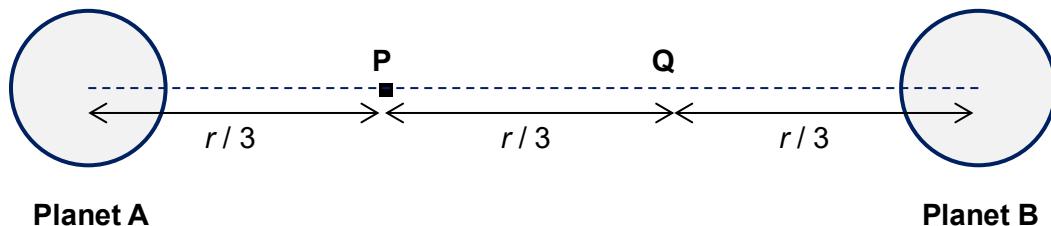


- 11 Planet A, of mass M , and planet B, of unknown mass, are found to be at a fixed separation of r , measured from their respective centres of mass. When a spacecraft moves from point P to point Q, its gravitational potential energy changes from U to $1.25U$.



What is the mass of planet B in terms of M ?

A $\frac{5M}{4}$

B $\frac{4M}{3}$

C $\frac{3M}{2}$

D $2M$