

- 16** A point source emits energy in the form of waves such that a detector of cross-sectional area A at a distance of x from the point source receives power P . A second detector of cross-sectional area $2A$, is placed at another position such that its distance is $0.5x$ from the same point source.

What is the power received by the second detector?

A P

B $2P$

C $4P$

D $8P$