

28 Waves P and Q have the same amplitude. The waves meet in phase at point X and interfere to give a resultant wave with intensity  $I$ .

The amplitude of wave P is doubled.

What is the new intensity of the resultant wave at X, in terms of  $I$ ?

A  $0.44I$

B  $1.5I$

C  $2.3I$

D  $3.0I$