

- 10 A tractor of mass 1000 kg is connected by a tow-bar to a trailer of mass 1000 kg. The total resistance to motion has a constant value of 4000 N. One quarter of this resistance acts on the trailer.

When the tractor and trailer are moving along horizontal ground at a constant speed of 6 m s^{-1} , what is the force exerted on the tractor by the tow-bar?

A 0 N

B 1000 N

C 3000 N

D 4000 N

Space for working