

- 11** The IKAROS satellite has mass 320 kg and moves through space using a solar sail of area 20 m^2 . The average solar wind pressure is $1.0 \times 10^{-5} \text{ N m}^{-2}$.

What is the acceleration of the satellite caused by the solar wind?

- A** $3.1 \times 10^{-8} \text{ m s}^{-2}$
- B** $6.3 \times 10^{-7} \text{ m s}^{-2}$
- C** $3.2 \times 10^{-3} \text{ m s}^{-2}$
- D** $6.4 \times 10^{-2} \text{ m s}^{-2}$

- 12** Three coplanar forces act on an object in the directions shown.