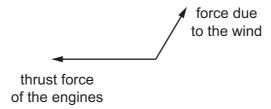
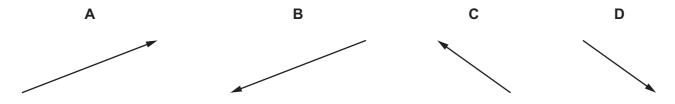
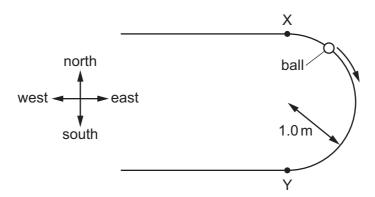
4 An aircraft travels along a horizontal path. Two of the forces that act horizontally on the aircraft are the thrust force of the engines and the force due to the wind. The vector diagram for these forces is shown.



Which vector represents the resultant horizontal force acting on the aircraft due to these two forces?



5 A ball travels from point X to point Y around a semicircular track of radius 1.0 m, as shown.



What is the displacement of the ball from X to Y?

- **A** 2.0 m
- B 2.0 m due south
- **C** 3.1 m
- **D** 3.1 m due south