

- 3** An aircraft flies with airspeed of  $350 \text{ km h}^{-1}$  through a  $100 \text{ km h}^{-1}$  jet-stream wind from the west. The pilot wishes to fly directly north from an airport in Singapore to an airport Thailand. To achieve this, the pilot points the aircraft away from the north direction.

**What is the speed of the aircraft in the direction of north relative to the ground?**

- A**  $250 \text{ km h}^{-1}$
- B**  $335 \text{ km h}^{-1}$
- C**  $364 \text{ km h}^{-1}$
- D**  $450 \text{ km h}^{-1}$