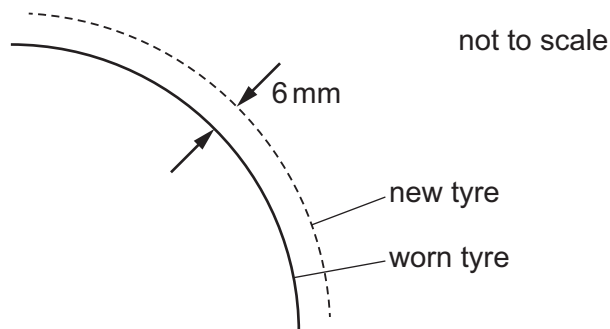


- 5** The speed shown on a car's speedometer is proportional to the rate of rotation of the tyres.

The variation of the diameter of a tyre as it wears introduces an error in the speed shown on the speedometer.

A car has new tyres of diameter 600 mm. The speedometer is accurately calibrated for this diameter.

The tyres wear as shown, with 6 mm of material being removed from the outer surface.



What is the error in the speed shown on the speedometer after this wear has taken place?

- A** The speed shown is too high by 1%.
- B** The speed shown is too high by 2%.
- C** The speed shown is too low by 1%.
- D** The speed shown is too low by 2%.