

**22** Student X fires a starting pistol which produces smoke and sound. Student Y is standing 100 m away and sees the smoke the instant it is produced. The speed of sound in air is 340 m/s.

What is the time delay between student Y seeing the smoke and hearing the sound?

**A** 0.29 s

**B** 0.59 s

**C** 1.7 s

**D** 3.4 s