

22 A source X emits a sound wave of constant frequency f .

The wave is subsequently received at a stationary detector Y.

The frequency of the wave that is detected by Y is less than f .

What could be the reason for this?

- A** Between X and Y, the wave undergoes diffraction.
- B** Between X and Y, the wave undergoes reflection.
- C** X is moving away from Y.
- D** X is moving towards Y.