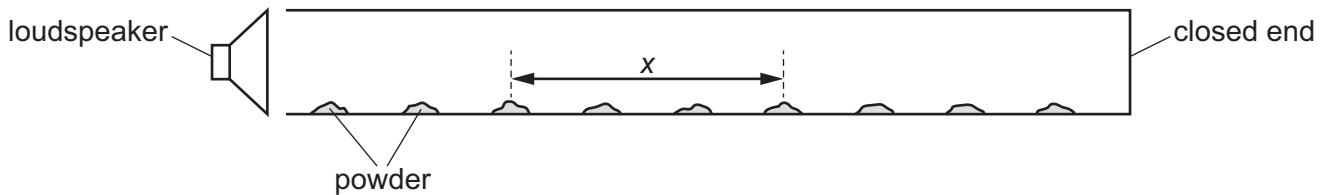


- 24** A loudspeaker is set up at the open end of a closed tube containing powder.

When the loudspeaker produces sound of frequency 1200 Hz, a stationary wave is produced in the tube. The powder gathers at the nodes of the stationary wave as shown.



The speed of sound in the air is 336 ms^{-1} .

What is the value of distance x ?

- A** 28 cm **B** 42 cm **C** 84 cm **D** 112 cm