

**16** Two sound waves, both of frequency 200 Hz but with a phase difference of  $30.0^\circ$ , travel along the same path.

What is the smallest separation of the compressions of these waves? The speed of sound is  $324 \text{ ms}^{-1}$ .

A  $0.135 \text{ m}$

B  $0.270 \text{ m}$

C  $0.540 \text{ m}$

D  $1.49 \text{ m}$