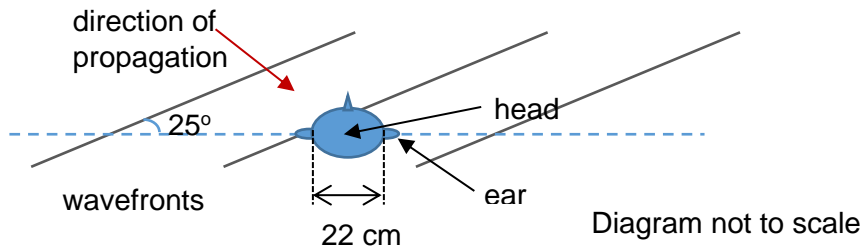


- 16** Humans are able to detect the general direction of a sound source because sound waves from the source reaches the left and right ears at slightly different times.

The figure shows the top view of a human head with the two ears 22 cm apart. Sound waves of wavelength 1.7 m from a distant source reach the ears at an angle of 25° to the horizontal.



What is the phase difference between the waves reaching the left and right ear?

- A** 0.34 rad **B** 0.58 rad **C** 0.74 rad **D** 0.81 rad