6 Two waves, of wavelength 12 cm, leave a source in phase.

The waves travel along different paths to a point X. The path difference at X is 18 cm.

Which of the following is the phase difference between the two waves at X?

⊠ **A** 0 radians

⊠ **B** $\dfrac{\pi}{2}$ radians

⊠ **C** π radians

⊠ **D** $\dfrac{3\pi}{2}$ radians

(Total for Question 6 = 1 mark)