Phase Difference Practice Questions

Phase difference

1) State the following fractions of a wavelength in terms of radians
   a. ½
   b. ¼
   c. 1/8
   d. 2 ½

2) At what phase difference will two points on a wave be completely out of phase?

3) Look at the diagram below. What is the phase difference of these two waves?

4) Look at the diagram below
   a. Which two points have a phase difference of 2π rad?
   b. Which two points have a phase difference of π rad?
   c. Which two points have a phase difference of 3π/2 rad?

5) Below shows a distance-displacement graph for a travelling wave, at times a, b, c and d
   a. At which two times are the waves completely out of phase (in antiphase)?
   b. What is the phase difference between a and b?
   c. Which waves have a phase difference of π/2?