5 A toy produces continuous waves when floating on the surface of a pool of water.

The waves spread out as circular wavefronts.

Diagram 1 shows the wavefronts produced when the toy is not moving, as viewed from above.

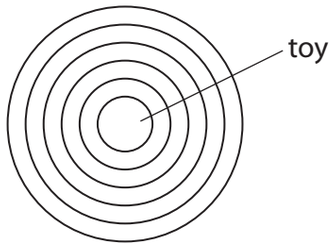

Diagram 1

Diagram 2 shows the wavefronts produced when the toy is moving across the surface of the pool of water.

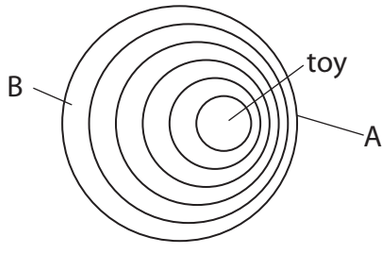

Diagram 2

(a) Draw an arrow on diagram 2 to show the direction the toy is moving.

(1)

(b) Explain how the frequency of the waves at point A is different to the frequency of the waves at point B.

(4)

(Total for Question 5 = 5 marks)