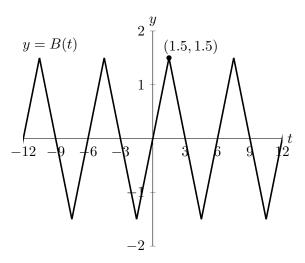
- **3**. [12 points] Oakley gets exercise every day in one of two ways: either by walking outside, or following instructions from an exercise app.
 - f(d) is the amount of time, in minutes, it takes Oakley to walk d miles.
 - f(d) is invertible.
 - W(t) is Oakley's heart rate, in beats per minutes, t minutes after they start walking.
 - A(t) is Oakley's heart rate, in beats per minutes, t minutes after they start using the exercise app.
 - **a**. [8 points] For each of the following, give a practical interpretation of the given expression, or explain why the expression does not make sense in the context of the problem.
 - i. f⁻¹(5)
 ii. W(f(1.5)) = 95
 iii. W(40) < A(20)
 - **b**. [4 points] Find an expression for Oakley's average speed, in miles per **hour**, when Oakley has walked a total of d miles. Your answer may involve f, W, and/or A.
- 4. [10 points] The plot below shows a graph of y = B(t), the height in feet of a buoy floating in the ocean t minutes after 6 am.



Use the graph to answer the following questions:

- **a**. [2 points] What is the period of B(t)? Include units.
- **b**. [3 points] For each of the following transformations, write down if the the function is even, odd, or neither.
 - i. B(t 7.5) + 1. ii. -B(t) + 2.25. iii. B(-t).
- c. [5 points] Let G(h) be the function telling you the height in **inches**, at time h hours after **8 am**. Write a formula for G(h) in terms of B. (Recall that there are 12 inches in one foot.)