Billy is walking to school. Below is a graph of his distance from home as a function of elapsed time. Your group should use the graph to write an answer for each question below.

1. When did Billy get to school?
2. Did Billy start out slowly or quickly?
3. What was he doing between times a and b?
4. What happened at time b?
5. What may be said about his trip for c < t < d?
6. When was he walking most quickly?
7. Make up a simple story to explain the details of "Billy’s Walk to School." You may be asked to share your story. Be prepared to critique others' stories if they do not "fit" the graph.

Three Pillars of Calculus: 1. Derivatives  2. Integrals  3. Limits

Ex: The DERIVATIVE FUNCTION consists of taking the slope of a tangent line at each point on the original function. On the axes below, let's graph the derivative of \( y = \sin x \) in blue.
Ex: One application of the INTEGRAL is to find the area under one section of a function. On the axes below, let’s find the integral from 0 to $\pi$ as shown in blue.

$$\int_{0}^{n} \sin(x) \, dx = 2$$

$n = 3.141$