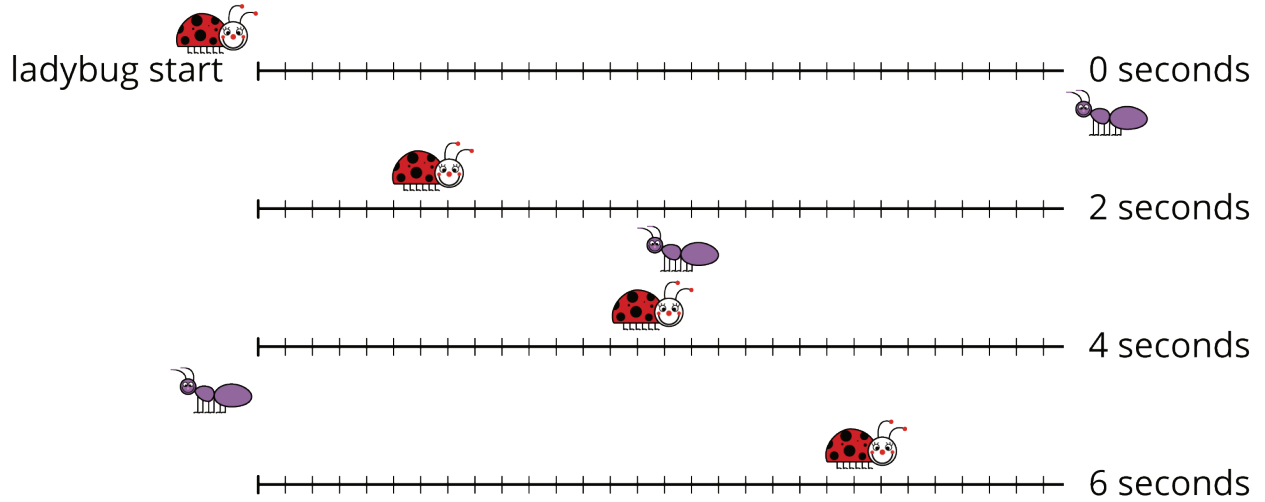


Unit 4 Lesson 11: On Both of the Lines

1 Notice and Wonder: Bugs Passing in the Night (Warm up)

Student Task Statement

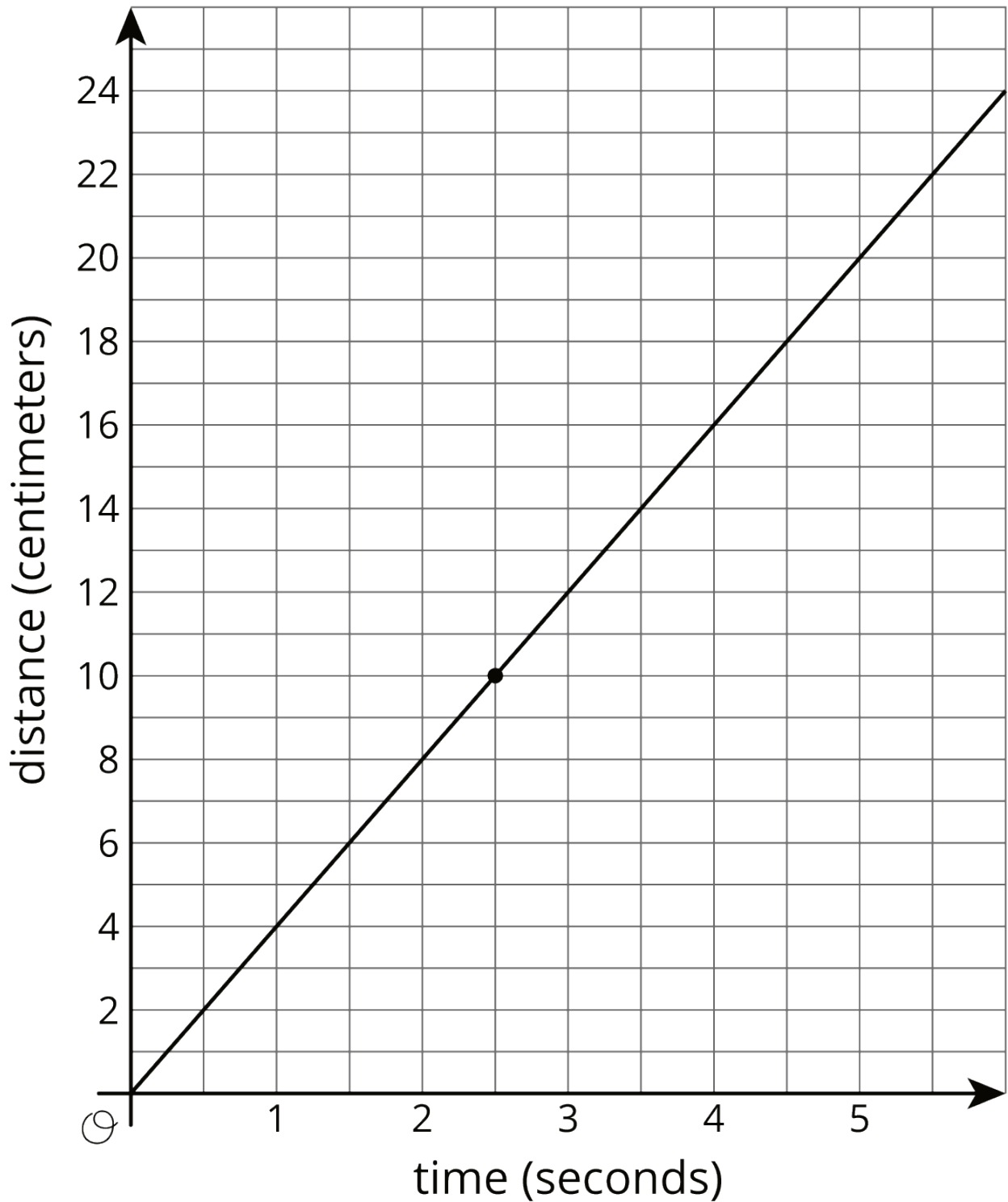
What do you notice? What do you wonder?



2 Bugs Passing in the Night, Continued

Student Task Statement

A different ant and ladybug are a certain distance apart, and they start walking toward each other. The graph shows the ladybug's distance from its starting point over time and the labeled point $(2.5, 10)$ indicates when the ant and the ladybug pass each other.



The ant is walking 2 centimeters per second.

1. Write an equation representing the relationship between the ant's distance from the ladybug's starting point and the amount of time that has passed.
2. If you haven't already, draw the graph of your equation on the same coordinate plane.

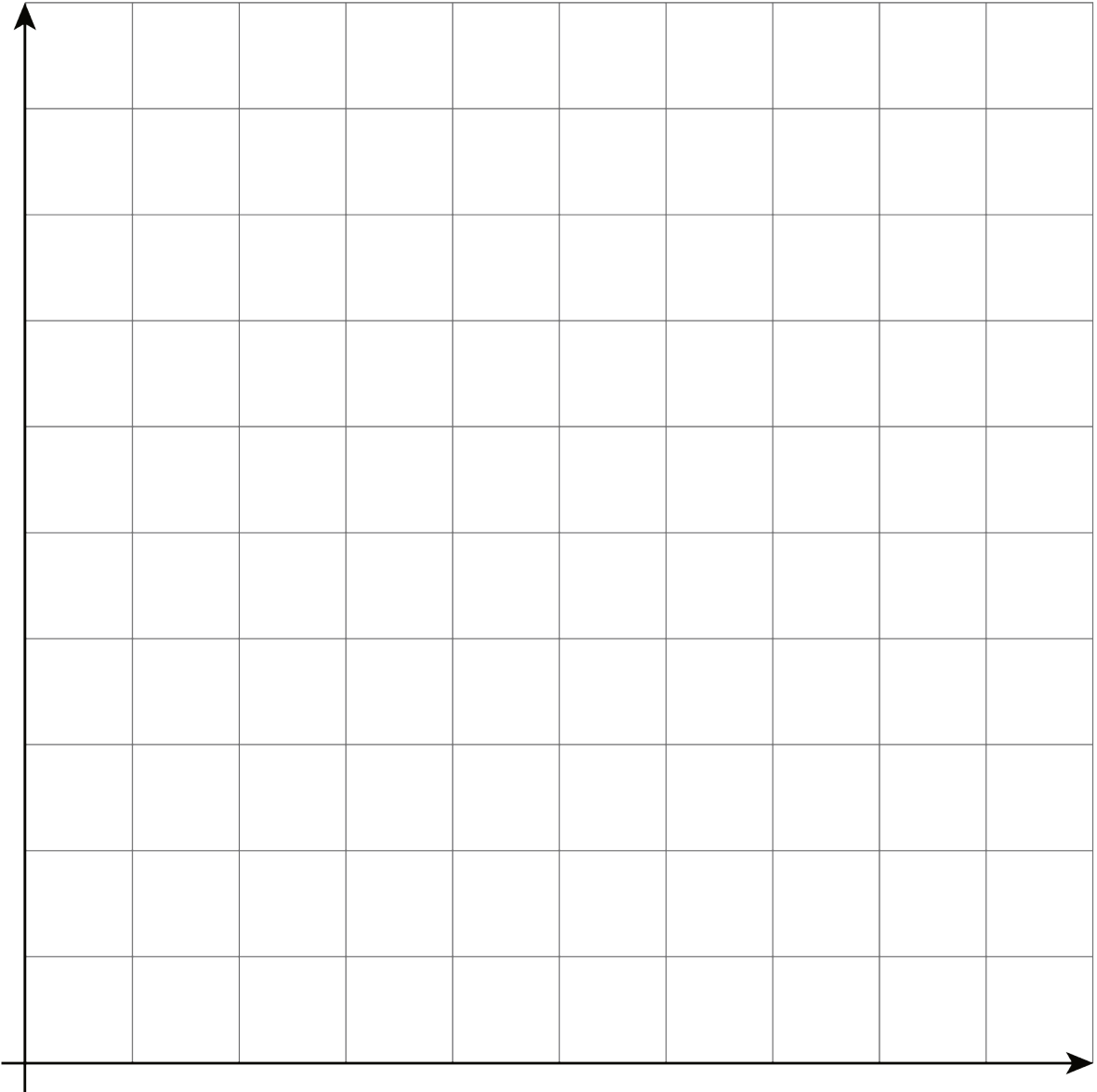
3 A Close Race

Student Task Statement

Elena and Jada were racing 100 meters on their bikes. Both racers started at the same time and rode at constant speed. Here is a table that gives information about Jada's bike race:

time from start (seconds)	distance from start (meters)
6	36
9	54

1. Graph the relationship between distance and time for Jada's bike race. Make sure to label and scale the axes appropriately.



2. Elena traveled the entire race at a steady 6 meters per second. On the same set of axes, graph the relationship between distance and time for Elena's bike race.

3. Who won the race?