

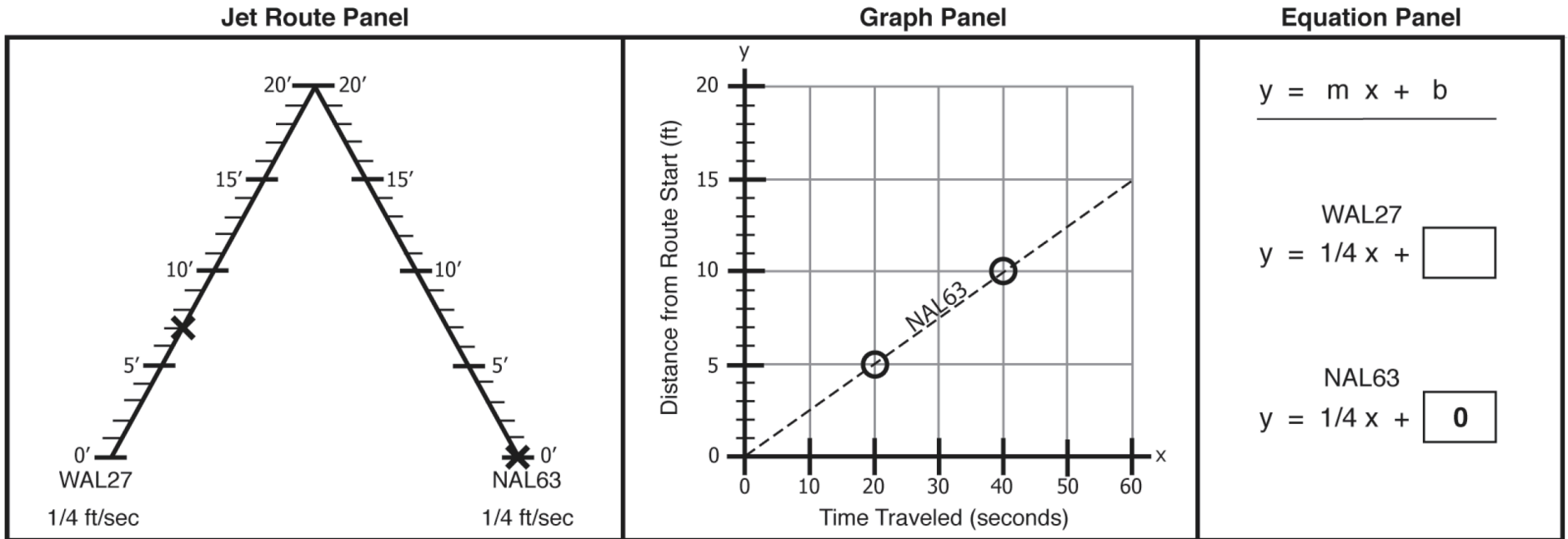
Name _____



Student Assessment D

Analyzing Headstart: Two Planes Flying at the Same Speed

1. Use the information given in the Jet Route Panel or in the Graph Panel to do the problem below. You do **not** need to use the simulator.



Jet Route Panel: The starting positions are shown.

Graph Panel: The NAL63 line is shown.

Equation Panel:

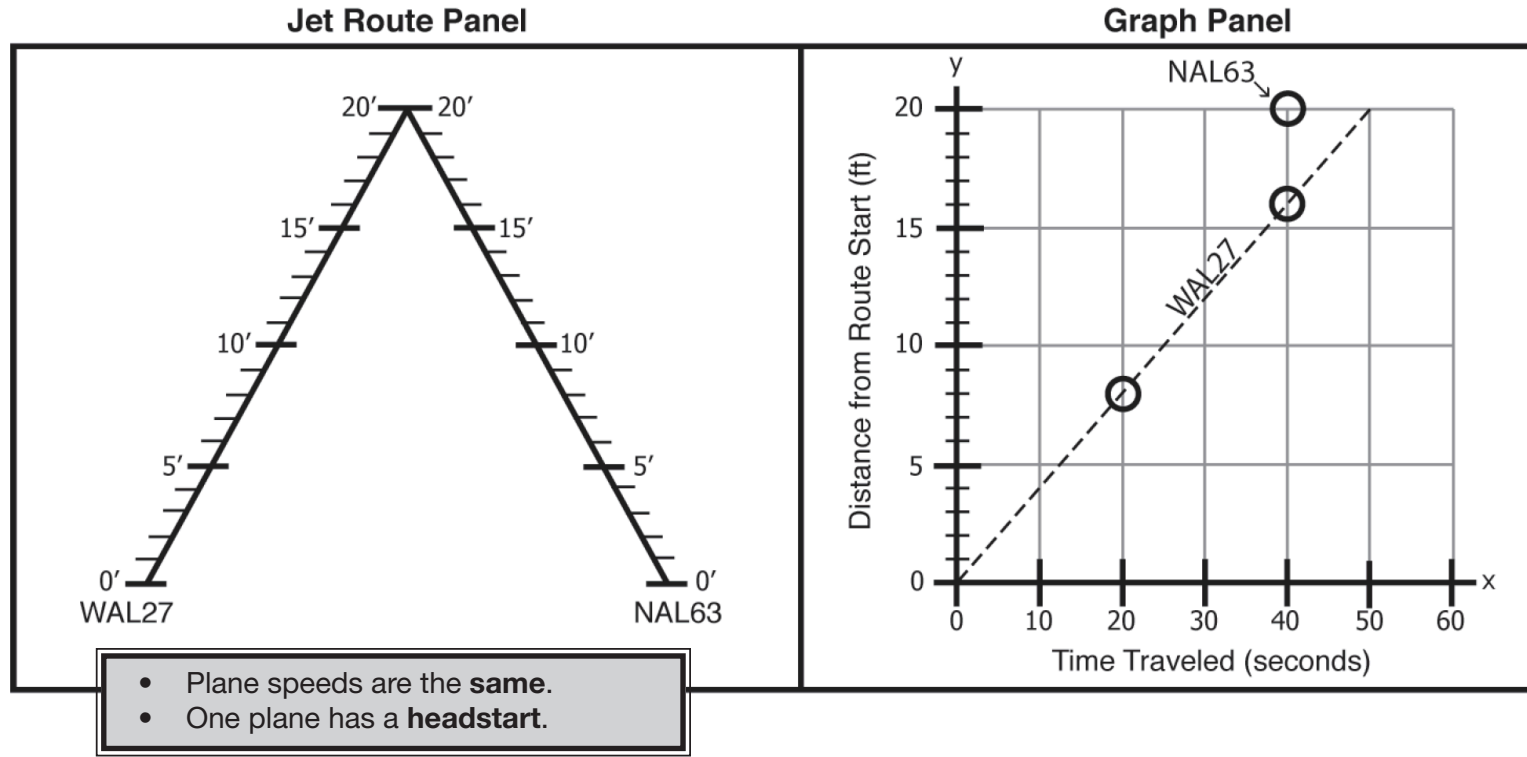
- (a) Are the planes flying at the same speed? Yes No
- (b) What is the WAL27 starting position? _____ ft
- (c) What is the NAL63 starting position? _____ ft

- (b) Plot points (•) on the graph to mark the WAL27 position at 0 seconds, at 20 seconds, and at 40 seconds..
- (e) Connect the two points to draw the WAL27 line.

- (a) Fill in the missing value in the WAL27 equation.



2. Use the information given in the Equation Panel to do the problem below. You do **not** need to use the simulator.



In the **Graph Panel**:

- (a) Which plane has a headstart? WAL27 NAL63
- (b) Plot one more point (•) for the NAL63 line.
- (c) Connect the two points to draw the NAL63 line.

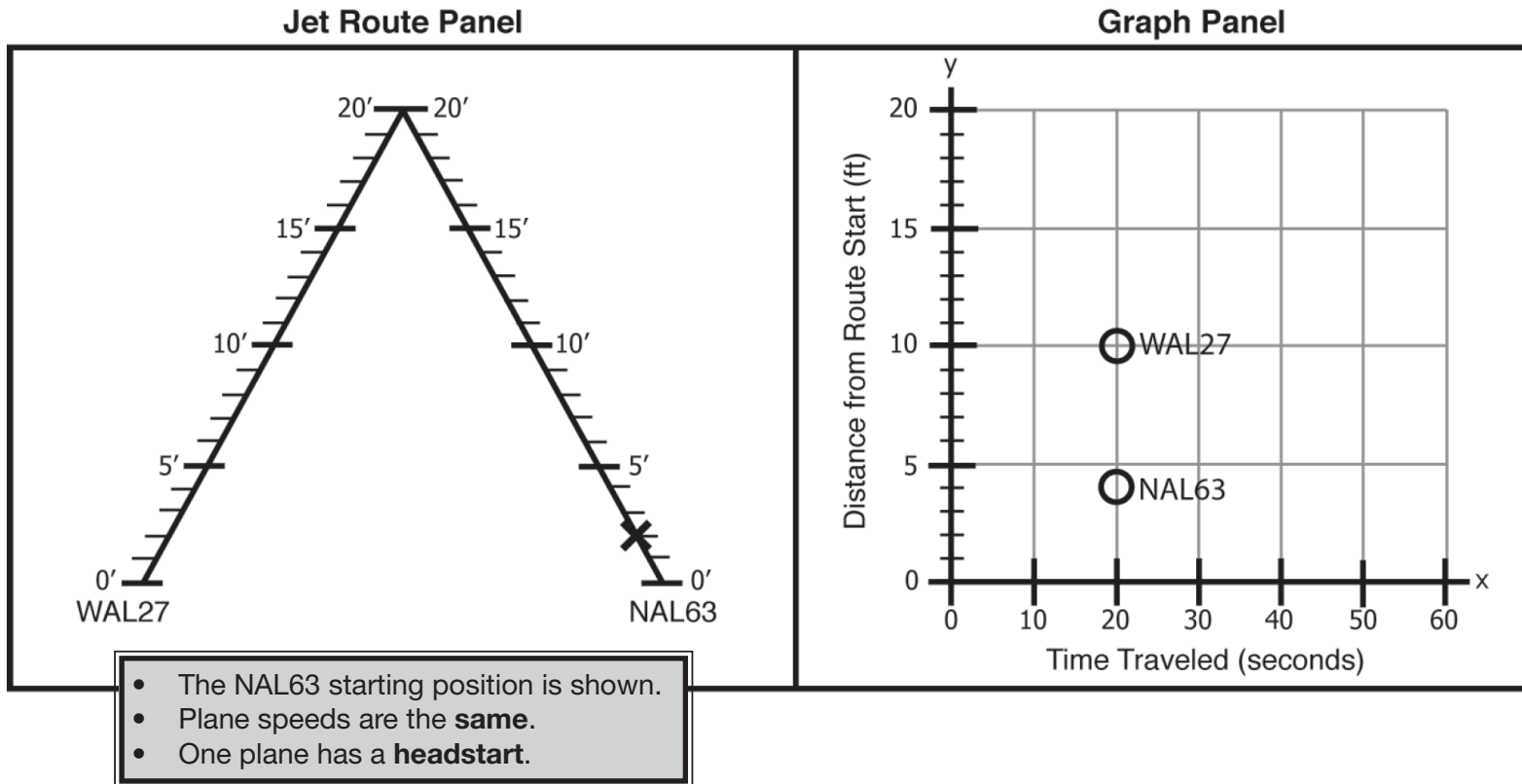


In the **Jet Route Panel**:

- (d) Place an **x** at the WAL27 starting position.
- (e) Place an **x** at the NAL63 starting position.



3. Use the information given in the panels to do the problem below. You do **not** need to use the simulator.



In the **Graph Panel**: One point is shown on the NAL63 line and one point is shown on the WAL27 line.

(a) At 20 seconds, what is the WAL27 lead? _____ ft



In the **Jet Route Panel**: The NAL63 starting position is 2 feet.

(b) Place an **x** at the WAL27 starting position on its jet route.

(c) How did you know where to place the WAL27 **x**?