

# Fred and Carla



Two astronauts, **Carla** and **Fred**, land on a distant planet. Each astronaut makes several temperature readings. At first, their measurements agree, but not for long. Below are **Carla's** and **Fred's** data:

<u>Carla</u>	<u>Fred</u>
-40°	-40°
36°	99°
21°	68°
70°	155°
10°	50°

**Help Carla and Fred figure out if there is a relationship between their measurements by graphing their data.**

## PROCEDURE

1. On a separate sheet of graph paper, set up a graph using appropriate axes, intervals, and origin. Plot **Carla's** data on the *X*-axis. Plot **Fred's** data on the *Y*-axis.
2. After plotting the points, draw the best straight line.
3. Determine the equation for the line by finding the slope and the *Y*-intercept.
4. Write the equation in the form  $Y = mX + b$ . Remember, **Fred** is *Y* and **Carla** is *X*.

## CONCLUSIONS

1. What is the equation for the line? \_\_\_\_\_
2. What is a reasonable explanation for the fact that **Carla** and **Fred** obtained different results while measuring the same temperatures? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_