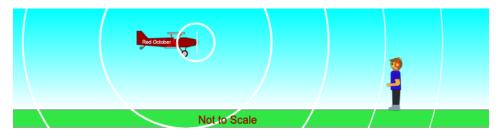
Speed from Doppler

Step 1: Below is a picture of your plane moving towards you. Next to this picture give the temperature of the air, the frequency of the plane at rest, and the frequency as it is approaching you.



Step 2: Calculate the speed of sound at the fairgrounds based on the temperature you recorded above. Show you work

Step 3: Using the Doppler Equations for a source of sound approaching you, find the speed of the plane. Show all your work neatly below. Enter your answers into your program to check that you did everything properly

Step 4 (Optional): Calculate the frequency you would hear when the plane is moving away from you.