7. Set the fan to each speed in the following table and record the pressures.

Fan Setting	Velocity Pressure (W.C.)
20	
40	
60	
80	

8. Next, leave the fan at the same speed (80) and move the probe up & down in 2 centimeter steps taking readings at each of these points.

Distance from center line	Velocity Pressure (W.C.)
0cm	
+2cm	
+4cm	
+6cm	
+8cm	
+10cm	
-2cm	
-4cm	
-6cm	
-8cm	
-10cm	

Questions:

1. Based on Bernoulli's equation, if the air velocity is tripled, by what factor should the pressure (ΔP) change? Compare this to the data in the first table.

2. What are the peak and average air velocity (in ft/s) based on the data in the second table?

3. Assuming that the duct is 8" deep, how much air(in ft^3/min [cfm]) is flowing though the section measured? How much air is flowing in the intake grill?