Worksheet: Pressure and Surface Area   Name_____

Experiment:
- A constant force was applied to different _____.
- The _____ was measured for each area chosen.

1. Which variable was manipulated? _____
2. Which was the responding variable? _____
3. Pressure will be plotted on which axis? _____

Area, A (cm^2)	Pressure, P (N/cm^2)		
1.0	25.0		
2.0	12.5		
3.0	8.5		
4.0	6.4		
5.0	5.0		

Make graphs on your own graph paper.   Do not continue until told to do so.

Graph #1 (P vs. A**)** was a _____. This means P is _____ proportional to A.

Graph #2 (P vs. 1/A) was a _____. This means P is _____ proportional to 1/A.   P α ____

How do you turn a proportion into an equation? _____

P = ____ x ____   OR   P = —————   rearrange   P x ____ = ____

In the last column of the table, calculate "P X A".   Within the bounds of experimental error, "P x A" is a _____.

Challenge: PA = k, so what does "k" represent? Fill in the units with the video to find out: