## Reading Assignment for November 22 Sections 13.1 Through 13.3

Please notice that this file is two pages long.

## 13.1 Fluids and Density

- Hopefully, you've seen density before.
- A gas's density can change because it can be compressed. Liquids and solids, on the other hand, have a constant density.

## 13.2 Pressure

- This section explains the famous phenomena that the pressure in a liquid increases with depth.
- Make sure to check out the examples here. They'll give you a good idea of how to apply the pressure equation.
- The same basic idea applies to gases too, so now you understand why the atmospheric pressure is less in Albuquerque than at sea level!
- If you've ever wanted to know how a barometer works, this is your section!

## 13.3 Buoyancy

- <u>Buoyancy</u> The upwards force exerted by a fluid. It's kind of like the normal force but obviously not as strong since your can sink into a liquid.
- The buoyant force depends on the density of the fluid and how much of the fluid is displaced.
- This section also has the famous result about how density determines whether an object will sink or float.