**Density of H2O**

**Problem: Which technique will be the most accurate way to calculate density: using two measurements and the equation (M/V) or solving the slope of a mass vs. volume graph?**

**Material: scale, water, graduated cylinder.**

**Data , Graph, Calculations:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Mass of G. cylinder** | **Mass of G. cylinder + H2O** | **Mass of H2O** | **Volume** | **D (m/v)** | **D (slope)** |
|  |  |  | **5 ml** |  |  |
|  |  |  | **10** | **X** | **X** |
|  |  |  | **15** | **X** | **X** |
|  |  |  | **20** | **X** | **X** |
|  |  |  | **25** | **x** | **X** |

**\*\*Calculations must include:**

1. **One density calculated using the equation.**
2. **The slope of your graph.**
3. **Percent error for both densities.**

**\*\*Actual density of water at room temp: .99987 g/ml**

**Be sure to calculate % error.**

**Conclusion: Questions from the notes.**