

Verifying the Absolute Zero of Temperatures (Part A only)**OVERALL:**

1. ASA: not completed -2 pts
2. Significant Digits; 2 or more errors on report page -1 point
 - a. Pbar, cm Hg (3 sig figs) multiplication → Pbar, cm H₂O (3 sig figs) → addition = Total P, cm H₂O (3 sig figs; answer reported to one's place)
 - b. Pbar, cm Hg (2 sig figs) multiplication → Pbar, cm H₂O (2 sig figs) → addition = Total P, cm H₂O (2 sig figs; answer reported to ten's place)
3. Procedure not followed correctly:
 - a. levels in manometer not recorded to nearest 0.1 cm-½ point
 - b. temperature not recorded to nearest 0.1°C-½ point
 - c. data points do not "fill" the grid area on graph (ref. Appendix V)-½ point
 - d. axes not labeled on graph (ref. Appendix V)-½ point
4. results incorrect:
 - t₀ not within ±50°C of generally accepted value, nothing noted on lab report -1 point
 - BUT student recorded theoretical value in lab report.....-½ point

Generic Grading Guidelines:

Each lab report is worth 10 pts (max.) and will be graded on the following basis:

A 10-point Lab Report will have the following attributes:

1. extra effort and high-level thought are evident throughout
 2. proper significant figures are used throughout
 3. proper units are used throughout
 4. calculations are shown
 5. calculated results are correct
 6. answers are correct (or at least reasonable); "unknowns" are correctly identified (2 points)
 7. unreasonable results are noted and an explanation is attempted
 8. conclusions logically follow from experimental results
 9. lab procedures have been followed exactly
 10. written answers are detailed and thorough; complete sentences are used; work is legible
 11. student name, course number, section number, date, etc. is included on each page
 12. report is turned in on either original lab manual pages (cut or torn neatly from the book) OR photocopied pages from the manual
 13. only the pages that are clearly meant to be included are included with the final report; introductory text is NOT included with the final report
- In general, 1 point will be deducted from the 10 points for each error or omission listed above.
 - **A complete lab report, no matter how many errors, will be assigned a minimum of 6 points.**
 - Zero points will be assigned to laboratory reports that are substantially incomplete.
 - **Students who arrive late to their scheduled lab meeting will have the following points deducted from that week's lab report: 1st offense = -0 points, 2nd offense = -1 point, 3rd offense = -2 points...**