

Elementary Statics

Problem Solving

1. Read the problem carefully and correlate the physical situation with the physical principles you know.
2. Identify what you know (knowns) and what you are trying to find (unknowns).
3. Draw the necessary diagrams to relate the knowns and unknowns.
4. Apply the relevant physical principles to relate the knowns and unknowns. This usually results in one or more mathematical equations to solve.
5. Solve the equations to find the unknowns.
 - Your results are no more accurate than the given data. In this class, you will assume the given data is accurate to three (3) significant figures, and you will give your results using three (3) significant figures.
 - Keep at least five (5) significant figures in your calculations. Your results will be accurate to less significant figures than the number used in your calculations.
6. Use your common sense or technical knowledge to evaluate the results you have obtained. Are they reasonable?