Abstract

Introductory physics classes can feel overwhelming to students as there is a constant flow of new information each week. Summary sheets have been developed for sections on Electricity and Optics. In all of these sections, attention to detail is needed, and students are often confused when beginning to learn to solve problems. For electricity, four summary sheets are provided, one for resistors in series, one for resistors in parallel, one for capacitors in series and one for capacitors in parallel. Breaking down the knowledge into these four sheets has been an aid in helping students begin to solve problems involving simple circuit problems involving resistors and capacitors. In practice, students may need knowledge from one or all of these sheets to solve a more complicated circuit problem. Similarly, students often get confused when learning to solve optics problems. This is understandable as the same equation is used to solve both spherical mirror and lens problems, but with different sign conventions. Two summary sheets are provided, one showing the equations and conventions for spherical mirrors and a separate sheet for lenses. These summary sheets are a simple compilation of information, but have proved helpful to students in IPLS classes at Wright State University.

Spherical Mirrors

Electricity

Resistors in Series

Capacitors in Series

Optics

Resistors in Parallel

Capacitors in Parallel

Lenses

Thin Lens