


<p style="text-align: center;"><b>Objectives</b></p> 	<p>The students will be able to identify a situation in which the optimization method can be used given previous knowledge of how to do the problems. They will be able to correctly identify each step of the problem given a picture or video and the 12seconds application. Finally, they will be able to present their findings to the class in a visual presentation.</p>
<p style="text-align: center;"><b>Materials</b></p>	<p>The materials needed for this lesson are:</p> <ul style="list-style-type: none"> <li>• Camera/video camera</li> <li>• Calculus textbook</li> <li>• Computer with 12seconds.tv application</li> <li>• Projector for classroom display of presentation</li> </ul>
<p style="text-align: center;"><b>Procedures</b></p>	<ol style="list-style-type: none"> <li>1. Assign each student to a group of 3 or 4.</li> <li>2. The students will contact a business which uses the idea of optimization in its every day conduction of business.</li> <li>3. The students will capture the process at work on camera (either still or video).</li> <li>4. The students will create a video/ still presentation, explaining the steps of optimization using 12seconds.tv. May need more than one video.</li> <li>5. The students will present their presentation to the class.</li> </ol>
<p style="text-align: center;"><b>Evaluation</b></p>	<p>The students will be graded on group participation as indicated by group member survey. They will also be graded on correctness of the calculations. Finally, they will be graded on the quality of their presentation.</p>