

**MCV 4U Learning Goals and Success Criteria  
Optimization Problems**

<b>Learning Goal</b>	
I will be able to solve problems (including optimization problems) that require the use of derivatives and their properties. (AD2)	
<b>Success Criteria</b>	
I can: <ul style="list-style-type: none"> <li>• Make connections between the graphical or algebraic representations of derivatives and real world applications, and solve problems involving these applications.</li> <li>• Solve problems involving the optimization of polynomial, rational, and exponential functions.</li> </ul>	
<b>Assignment Information:</b>	
Your assignment will be completed on <b>Thursday, May 28<sup>th</sup></b> and <b>Friday, May 29<sup>th</sup></b> . It will be sent to you in an <b>Edsby message</b> at the start of class time (9:45 for period 2, 1:00 for period 4) or at an alternate time that we have arranged AHEAD OF TIME. You will have <b>60 minutes</b> from the time you receive it to have it back to me. <b>It is an open book assessment</b> . There will be a place to submit it on Edsby. Do not send it back as a message unless you want me to lose it. <b>IF YOU NEED TO MAKE ALTERNATE ARRANGEMENTS YOU NEED TO DO THAT BY WEDNESDAY, MAY 27<sup>th</sup></b> ! More details are included below.	
There is a more detailed outline below. These are the types of questions you can expect. To prepare well for this, you should (in this order): <ul style="list-style-type: none"> <li>• Review your notes and the video lessons. Go through the example problems and make notes so that you know why each step happened.</li> <li>• Get your notes and practice problems organized so that you can find things quickly. If you haven't done the assigned problems you definitely should BEFORE the assignment.</li> <li>• Complete questions in the suggested review that you think you need to do. <b>The text book should be your last stop, not your first!</b></li> </ul>	
<b>What to Expect</b>	<ul style="list-style-type: none"> <li>• Day 1 will be problems similar to those found in section 3.3 of your text (measurement, relative motion, etc.). Day 2 will be problems similar to those found in section 3.4 of your text (science and economics).</li> <li>• Each day you will receive four problems. You need to provide a complete solution for THREE of them. Marks will not be equal, so pay attention when choosing. With that being said, choose the three that you can answer best, even if your maximum possible mark total is lower than the maximum (the max number of marks is in the neighbourhood of 20 per day – if you don't do the question out of the most marks, you can still get within two of the maximum marks)</li> <li>• Most problems will be similar to those found in the homework/notes. There will also be unfamiliar questions to show understanding. Remember to use what you know! Try something – you'll probably surprise yourself 😊</li> </ul>
<b>Text book Questions:</b>	p. 156 #14 – 17, 19, 20, 22 – 25 p. 160 #16 – 8