

MPM 2D Learning Goals & Success Criteria
Chapter 3: Graphs of Quadratic Relations

Learning Goals	
I will be able to: <ul style="list-style-type: none"> • Explain properties of quadratic relationships, and relate the various forms of quadratic relations. (QR 1) • Solve quadratic equations and interpret their solutions. (QR 3) • Apply my understanding of quadratic relations to a variety of problem solving situations. (QR 4) 	
Success Criteria	
I can: <ul style="list-style-type: none"> • Graph data that represents a quadratic relationship and draw a curve of best fit. (QR 1) • Recognize the equation of a quadratic relationship in standard form ($y = ax^2 + bx + c$), and understand that its graph forms a parabola. (QR 1) • Use a table of values and second differences to identify quadratic relationships. (QR 1) • Identify the key features of a graph of a parabola (vertex, zeros). (QR 1) • Compare the graphs of exponential ($y = 2^x$) and quadratic ($y = x^2$) functions. (QR 1) • Expand and simplify second-degree polynomial equations (distributive property, FOIL). (QR 3) • Determine the zeros and maximum or minimum value for a quadratic relation from its graph or equation. (QR 4) 	
Test Information:	
Your test is Monday, April 20 th . I will release the test on Edsby at 10:50. You should also log in to Teams so that you can ask questions. This is also a way for me to do attendance and make sure that everyone is accessing the test. I will open a teams meeting at 10:45. If you have another class period 2 just join in at 11. Your test must be submitted to me by 12:40. This give you time to battle with technology. It is designed to be about an hour of work so you should have lots of time.	
There is a more detailed test outline below. Please refer to that while you study. To study: <ul style="list-style-type: none"> • Review your notes. Make sure that you have gone through the video lessons and the notes!! • Come to class in Teams on Friday morning if you have questions that you want me to take up. The whiteboard is working again so I can do that! • Redo (or do) your quizzes. Use the feedback on them to help you! • Complete questions in the suggested review or homework that you feel that you need to do. 	
What to Expect	<ul style="list-style-type: none"> • The test will be in two parts. <ul style="list-style-type: none"> ○ One will be multiple choice and two short answer questions and will be completed on line in Edsby. If that is going to be an issue for you because of internet access/technology access let me know and we will figure out a different plan. ○ The second part will look more like a regular test. You can print it, write on it, and send it back as a PDF, or you can write on lined paper and send that back as a PDF. If you can't print please label all key points on graphs! Writing with a tablet and stylus on the test is also an option if you can do that. Again, please contact me with any issues BEFORE Monday.
Questions to Expect	<ul style="list-style-type: none"> • Multiple Choice will cover the properties of quadratics – Identify key parts (zeros, a of s, etc), state direction of opening, identify if the relation is quadratic – and properties of zero and negative exponents (3.6) • The short answer questions will be: <ul style="list-style-type: none"> ○ Explain the methods for multiplying binomials (distributive property vs. FOIL) ○ Explain what a negative exponent does do its base. What is the value of any base raised to the power of zero? • The long answer part of the test that you will print will contain: <ul style="list-style-type: none"> ○ Find the equation of a parabola in factored form given the zeros and a point. Graph your parabola accurately (you'll need to know how to find the vertex!). ○ Word problem where you need to create an equation in factored form and answer some questions about the situation (ball from a building, etc) (see p. 157 #12, minus the paper folding) ○ Expand and simplify three expressions using the distributive property/FOIL ○ Write an equation in standard form given the zeros and a point (you need to go through factored from first). ○ Word problem where you will be asked to create an equation in standard form (see p. 168 #15)
Notes: Please study. Do the review, but also review your notes. If you need help, contact me. I can message you hints/photos or we can meet in Teams to figure things out. The more we communicate the more successful we will be.	