

Name: _____

Date: _____

Class: _____

Teacher: _____

Math Mini Quiz 6

This Mini Quiz, we're going to explore the math concepts that you've learned so far in this unit. This assignment should take you about **20 minutes**.

1) Each of the equations is given in one of the forms that we talked about in class (standard, factored, vertex). For each one, **label the form** and **write and label the other two remaining forms**

a) $y = 2(x - 5)(x + 1)$

b) $y = (x - 1)^2 - 4$

c) $y = 2x^2 + x - 1$

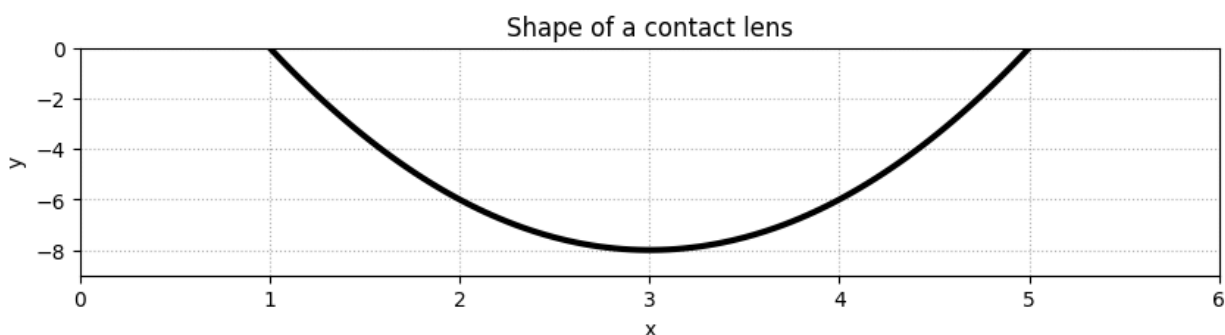
(yes, there's a back, don't forget it)

*note that actually the train would slow down as it approaches, but we are simplifying this problem

2) Below you have the graph representing the shape of a contact lens¹, often considered a more convenient way of correcting vision than glasses. Its shape follows a quadratic equation (similar to the parabolic example we covered in class).



Write the function $y(x)$ to express the shape of the contact lens. You may write it in any form that you would like. You may need to do some work, but not a lot of work to reach your answer.



¹ Contact lens image from <https://www.healthline.com/health/eye-health/how-to-put-in-contact-lenses>