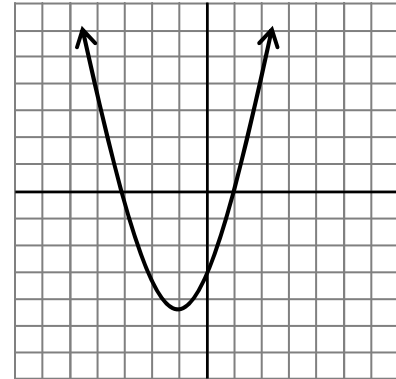


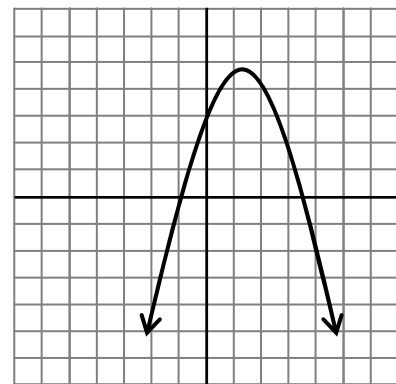
Working Backwards

NAME _____

To the right, a parabola is given. Working backwards, we want to find two lines that could represent the linear factors.



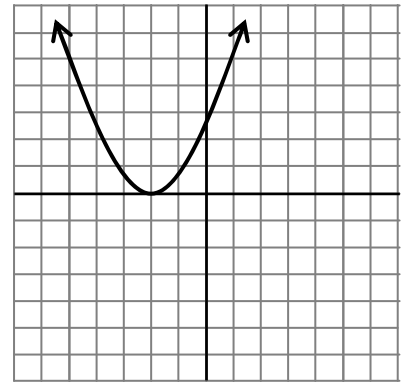
1. What is the left-most x-intercept of the parabola?
2. To the left of that point, what do we know about the two lines that represent the linear factors?
3. What is the right-most x-intercept of the parabola?
4. To the right of that point, what do we know about the two lines that represent the linear factors?
5. What do we know about the two lines between the two linear factors?
6. On graph sketch two lines that could represent the linear factors.
7. Write the equations for the lines you sketched.
8. Multiply the two expressions together.
9. Graph the resulting parabola. How does it compare to the graph given?
10. Follow the same steps for the parabola to the right to determine a possible equation. Below, describe how you got the equation you've found.



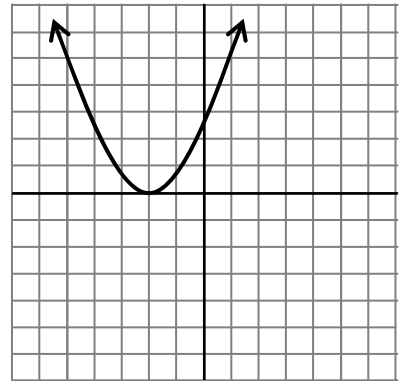
11. What is different about the x-intercept(s) of the graph to the right?

12. Sketch the lines that could represent the factors.

13. Describe the process of how you determined your answer for Question 12.



14. To the right is another graph just like the one above. Find an alternative pair of lines that could also satisfy the requirements for representing the factors. Graph them over the parabola to the right.



15. For the graph to the right, sketch the lines that could represent the factors.

16. Describe the process of how you determined your answer for Question 15.

