

Name: _____

Date: _____

Section 2.7 Investigate Inverse With a Mira

BLM 2-10

Investigate

Tools

- grid paper
- Mira

1. Graph the function $y = x$.
2. Create a table of values for $y = 2x + 4$. Plot the points on the same set of axes you used in step 1. Using a ruler, draw a straight line through the points.
3. Place the Mira so that it lines up along the graph of $y = x$.
4. Look through the Mira at the reflection of the line $y = 2x + 4$. Carefully plot the points of the reflection on the other side of the Mira.
5. Compare the original points and the reflected points one at a time. How are they connected?
6. Determine the equation of the line through the reflected points. How does this equation compare to the original?
7. Repeat steps 1 to 6 with the function $y = -4x + 5$.
8. **Reflect** How do the reflected points and their subsequent equations confirm what you know about inverses?

