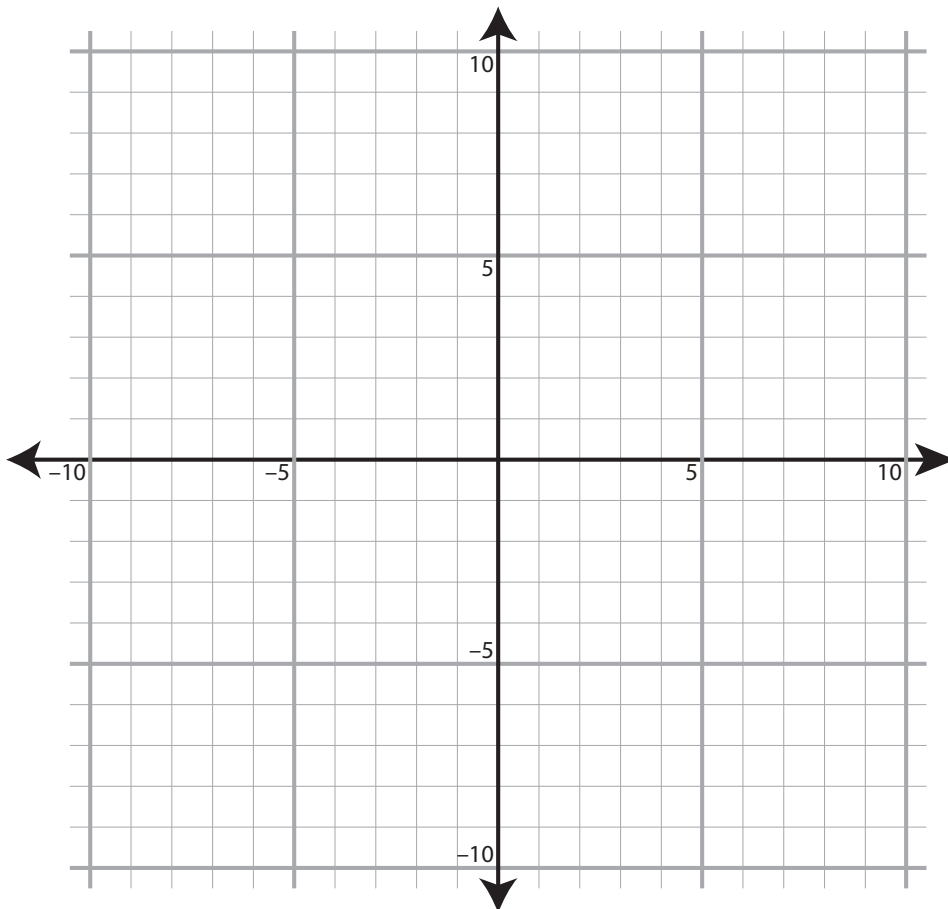


Walking the Line

Instructions

1. Choose 12 points scattered on the grid below. Find their coordinates.
2. Calculate the product of the x and y coordinates. For example, if you picked $(-1, 2)$, the product would be -2 .
3. Shade the part of the grid where the products are positive. Explain why you shaded that part.



Extension:

4. Find where on the grid that the product is zero. Mark it.
5. Explain why that region contains all the “zero-product” points.