**Challenge 5**

1. Draw P(-1, 1) U(-1, 3) G(3, 3)
2. Reflect across the line x = -3.
3. Reflect across the line y = -3.
4. Reflect across the line x = -1.
5. Rotate 450o counterclockwise.

**Challenge 6**

1. Draw A(-1, 5) B(-1, 7) C(3, 7) D(3, 5)
2. Use your ruler to draw the line **y = x** all the way across your graph. (This is the same as **y = 1x + 0**. It will be a diagonal line that starts at the origin and goes up 1, right 1. It will divide quadrants 1 and 3 diagonally in half.)
3. Reflect ABCD across the line **y = x.**
4. Draw E(-5, -7) F(-5, -9) G(3, -5) H(-2, -5) and reflect it across **y = x.**

**Challenge 7**

* Triangle ABC was rotated 90o counterclockwise about the origin, then translated 3 units right and 7 units up. The vertices of the **image** are A’’(7, 6); B’’(7, 2); C’’(5, 2). What are the original coordinates of A, B, and C?

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