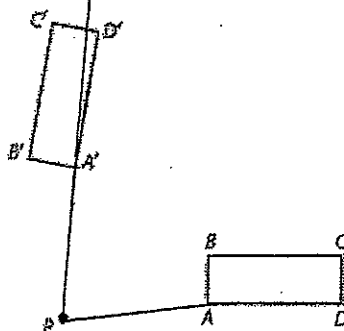


2. Find the angle of rotation and the direction of rotation in the given figure. Point P is the center of rotation.

80° counterclockwise

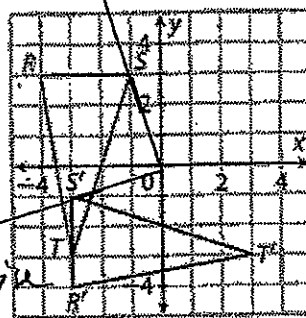


3. Write an algebraic rule for the rotation shown. Then describe the transformation in words.

$S(-1, 3) \rightarrow S'(-3, -1)$

$(x, y) \rightarrow (-y, x)$

Rotate about the origin 90° counterclockwise



5. Write the equation of the image of line l after a clockwise rotation of 90° .

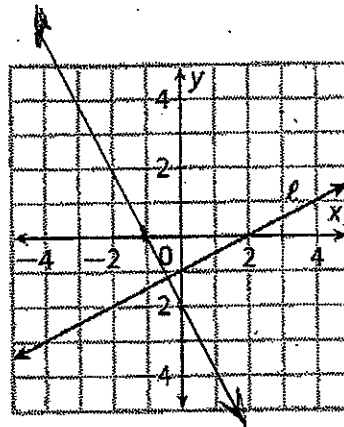
$m = -2 \quad b = -2$

$y = -2x - 2$

Pick 2 points & find their images:

$(0, -1) \rightarrow (-1, 0)$

$(2, 0) \rightarrow (0, -2)$



$m = \frac{1}{2}$

7. The Skylon Tower, in Niagara Falls, Canada, has a revolving restaurant 775 feet above the falls. The restaurant makes a complete revolution once every hour. While a visitor was at the tower, the restaurant rotated through 135° . How long was the visitor at the tower?

$\frac{135}{360} = \frac{3}{8} \leftarrow \frac{3}{8}$ of an hour

degrees in 1 revolution

$\frac{3}{8} \times 60 \text{ min} = 22\frac{1}{2}$ minutes