## Geometry <br> Rotation Practice \#1

State the segment or triangle that represents the image. You can use tracing paper to help you visualize the rotation.

1. $90^{\circ}$ clockwise rotation of $\overline{A B}$ about P .
2. $90^{\circ}$ clockwise rotation of $\overline{K F}$ about P .
3. $90^{\circ}$ counterclockwise rotation of $\overline{F L}$ about P .
4. $90^{\circ}$ counterclockwise rotation of $\overline{M P}$ about P .
5. $180^{\circ}$ rotation of $\triangle K E F$ about $P$.
6. $180^{\circ}$ rotation of $\triangle \mathrm{BCJ}$ about P .
7. $90^{\circ}$ clockwise rotation of $\triangle \mathrm{APG}$ about P .


Graph each image and find the coordinates after the given rotation.
8. $90^{\circ}$ clockwise around the origin.

10. $270^{\circ}$ counterclockwise around the origin.

9. $180^{\circ}$ counterclockwise around the origin.

11. $90^{\circ}$ counterclockwise around the origin.




Find the coordinates of each image after the given rotation (use the coordinate plane above if needed).
12. $\mathrm{A}(-2,3)$ rotated $90^{\circ}$ clockwise around the origin.
13. $\mathrm{B}(4,-6)$ rotated $90^{\circ}$ clockwise around the origin.
14. $\mathrm{C}(-6,-5)$ rotated $180^{\circ}$ clockwise around the origin.
15. $\mathrm{D}(0,-3)$ rotated $180^{\circ}$ clockwise around the origin.
16. $\mathrm{E}(-4,-5)$ rotated $270^{\circ}$ clockwise around the origin.
17. $\mathrm{F}(-2,3)$ rotated $270^{\circ}$ clockwise around the origin.
18. $\mathrm{G}(-2,1)$ rotate $90^{\circ}$ counterclockwise around the origin.
19. $\mathrm{H}(0,-3)$ rotated $90^{\circ}$ counterclockwise around the origin.
20. $\mathrm{I}(-2,-5)$ rotated $180^{\circ}$ counterclockwise around the origin.
21. $\mathrm{J}(3,-4)$ rotated $180^{\circ}$ counterclockwise around the origin.
23. $K(5,-6)$ rotated $90^{\circ}$ counterclockwise around the origin.
24. $\mathrm{L}(3,0)$ rotated $90^{\circ}$ counterclockwise around the origin.

