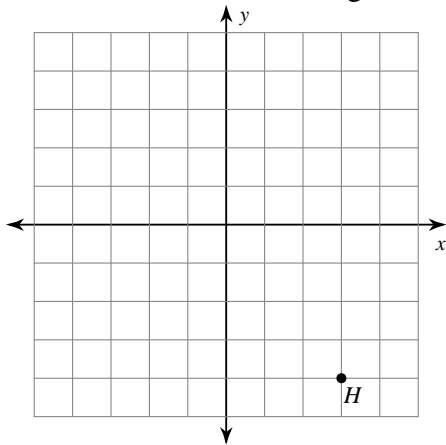


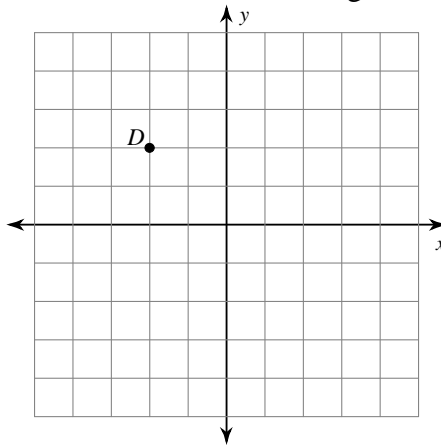
Rotations Worksheet 1

Find the coordinates of the vertices of each figure after the given transformation.

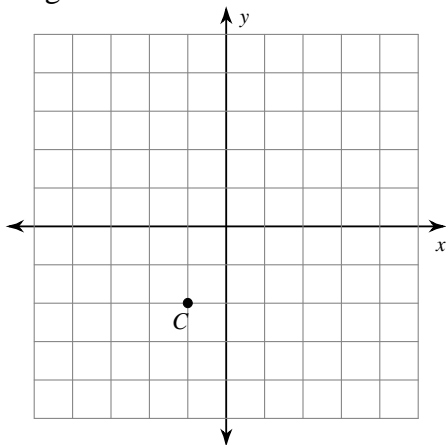
1) rotation 180° about the origin



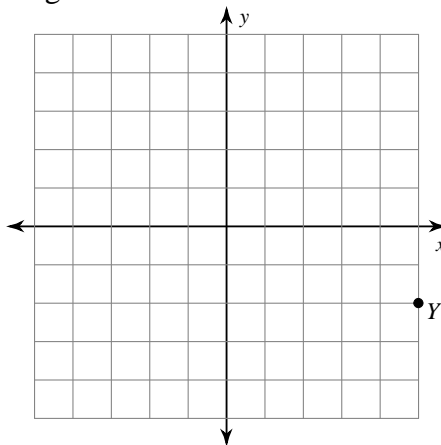
2) rotation 180° about the origin



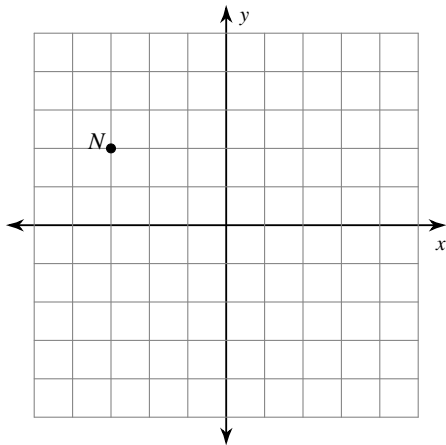
3) rotation 90° counterclockwise about the origin



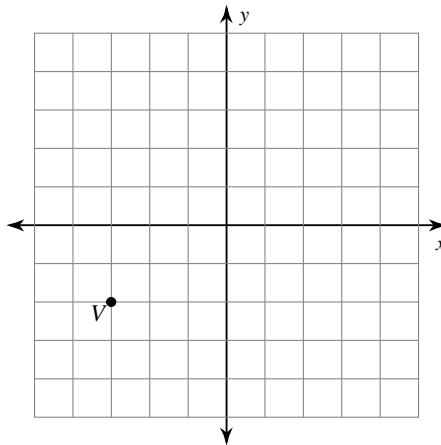
4) rotation 90° counterclockwise about the origin



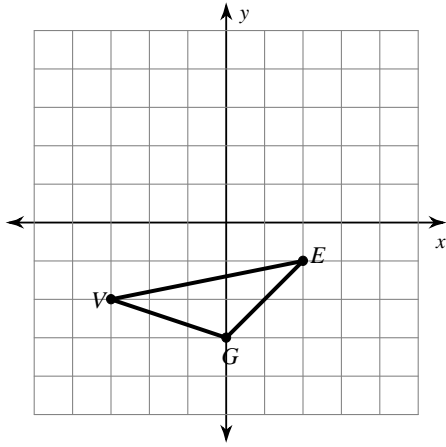
5) rotation 90° clockwise about the origin



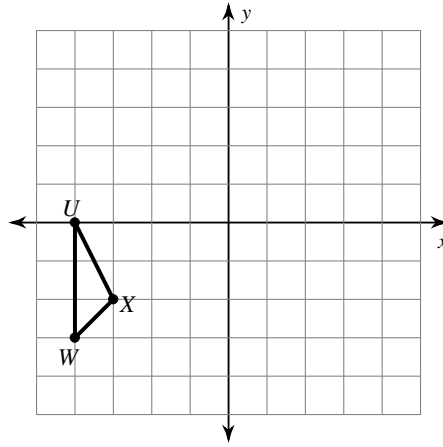
6) rotation 90° clockwise about the origin



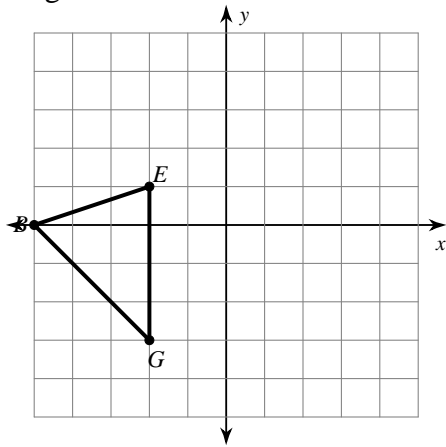
7) rotation 180° about the origin



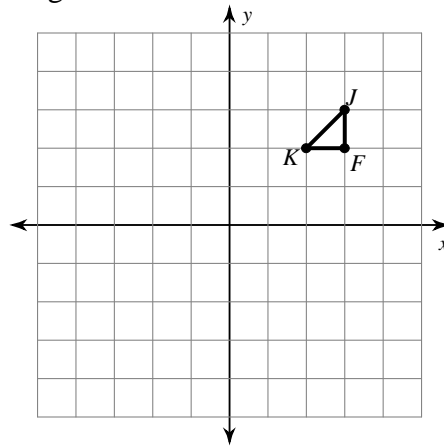
8) rotation 180° about the origin



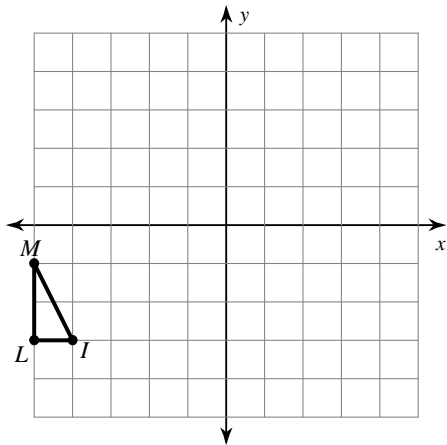
9) rotation 90° counterclockwise about the origin



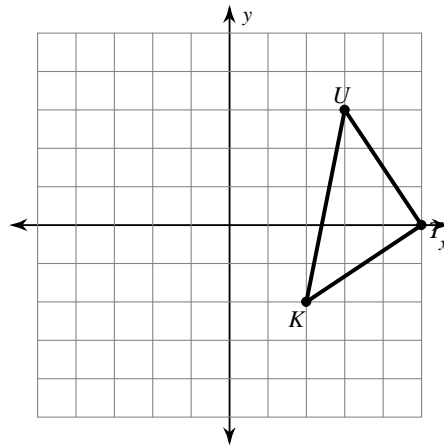
10) rotation 90° counterclockwise about the origin



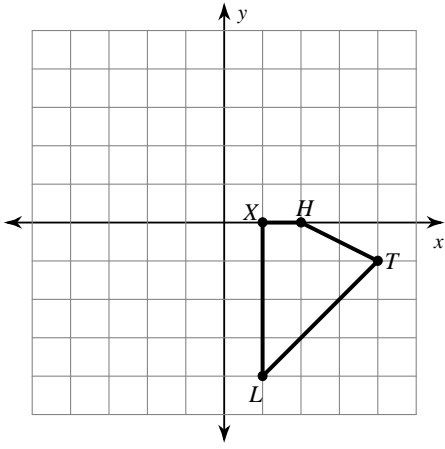
11) rotation 90° clockwise about the origin



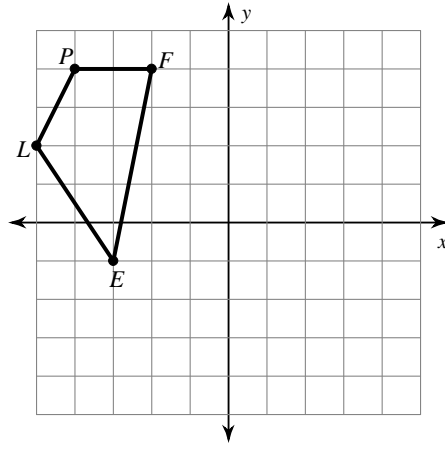
12) rotation 90° clockwise about the origin



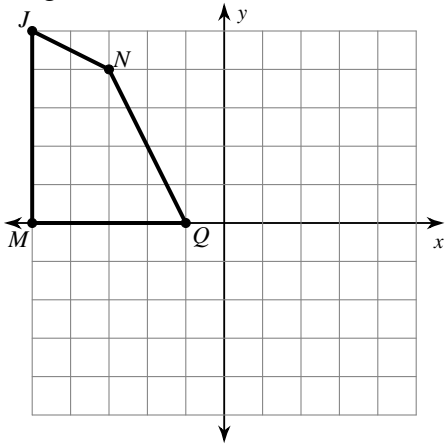
13) rotation 180° about the origin



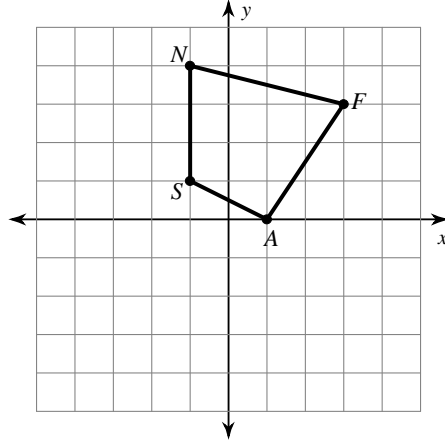
14) rotation 180° about the origin



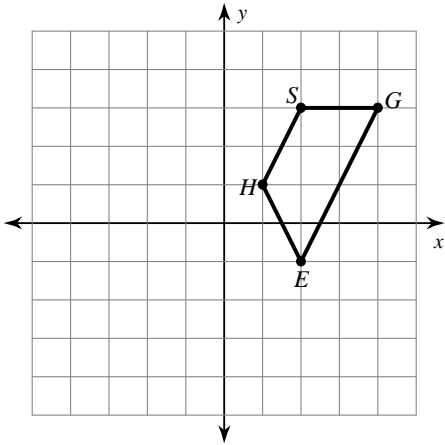
15) rotation 90° counterclockwise about the origin



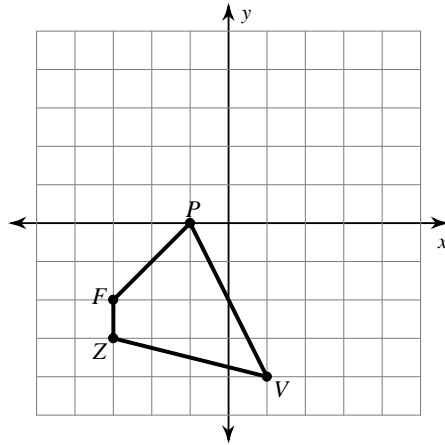
16) rotation 90° clockwise about the origin



17) rotation 90° clockwise about the origin



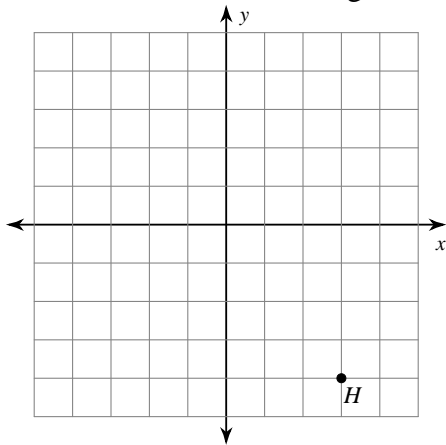
18) rotation 90° clockwise about the origin



Rotations Worksheet 1

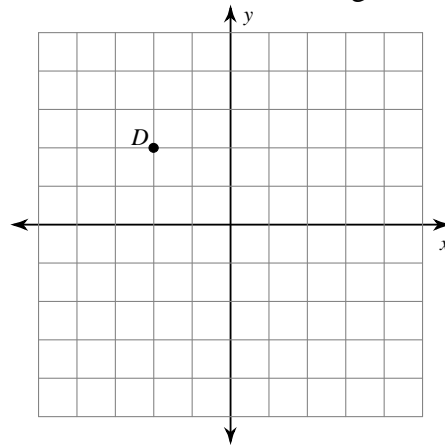
Find the coordinates of the vertices of each figure after the given transformation.

1) rotation 180° about the origin



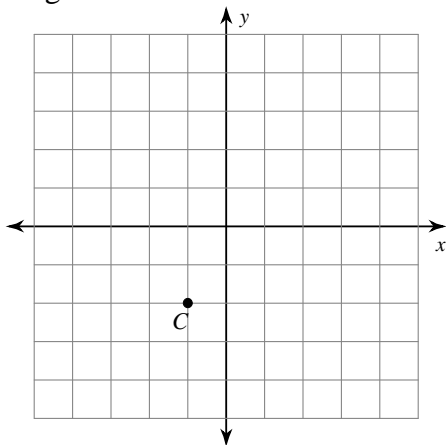
$H'(-3, 4)$

2) rotation 180° about the origin



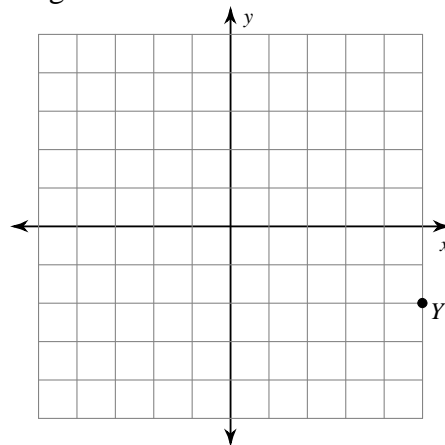
$D'(2, -2)$

3) rotation 90° counterclockwise about the origin



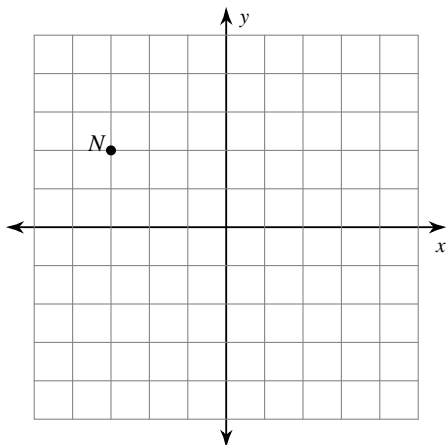
$C'(2, -1)$

4) rotation 90° counterclockwise about the origin



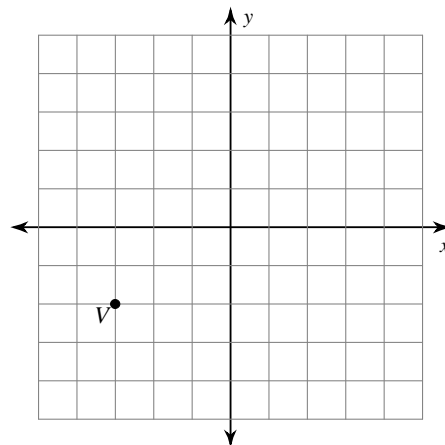
$Y'(2, 5)$

5) rotation 90° clockwise about the origin



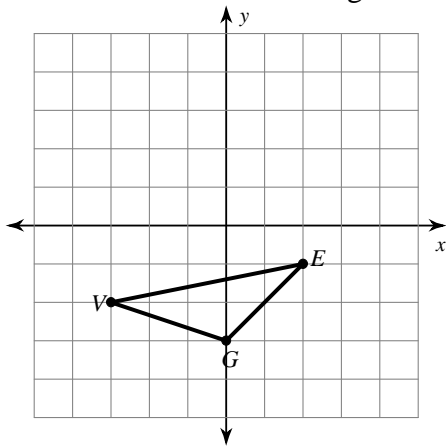
$N'(2, 3)$

6) rotation 90° clockwise about the origin



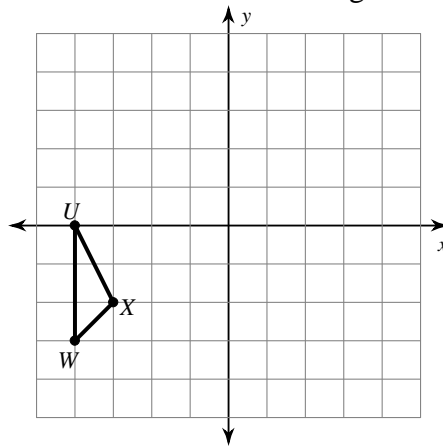
$V'(-2, 3)$

7) rotation 180° about the origin



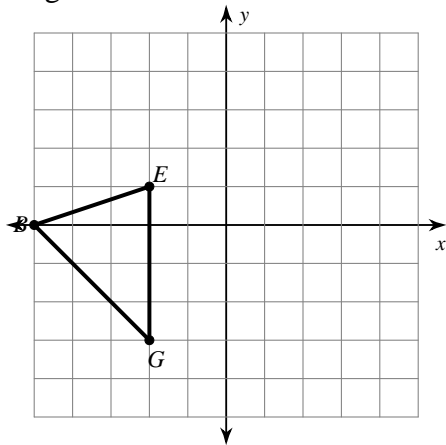
$V(3, 2), E(-2, 1), G(0, 3)$

8) rotation 180° about the origin



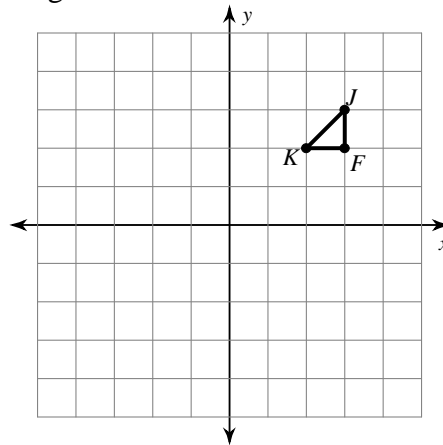
$W(4, 3), U(4, 0), X(3, 2)$

9) rotation 90° counterclockwise about the origin



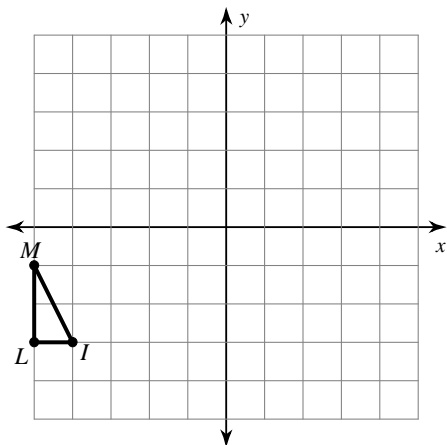
$B(0, -5), E(-1, -2), G(3, -2)$

10) rotation 90° counterclockwise about the origin



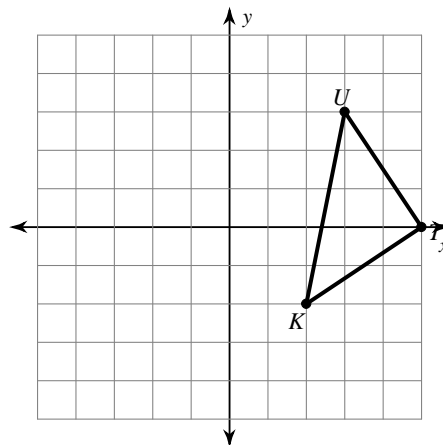
$K(-2, 2), J(-3, 3), F(-2, 3)$

11) rotation 90° clockwise about the origin



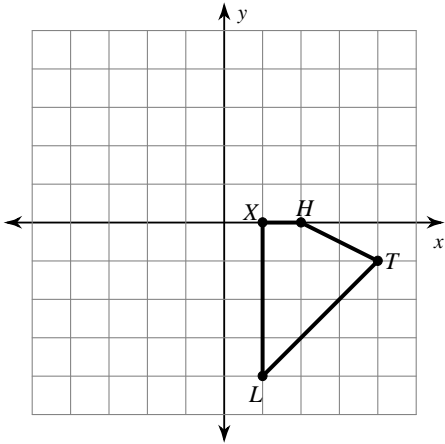
$L(-3, 5), M(-1, 5), I(-3, 4)$

12) rotation 90° clockwise about the origin



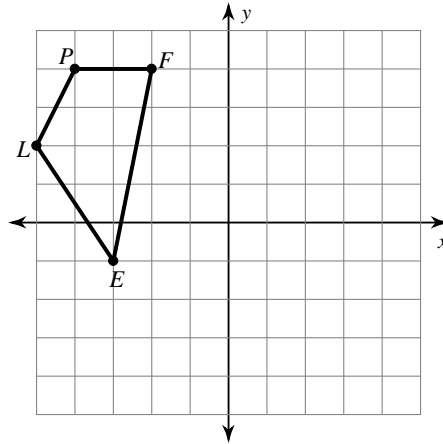
$K(-2, -2), U(3, -3), I(0, -5)$

13) rotation 180° about the origin



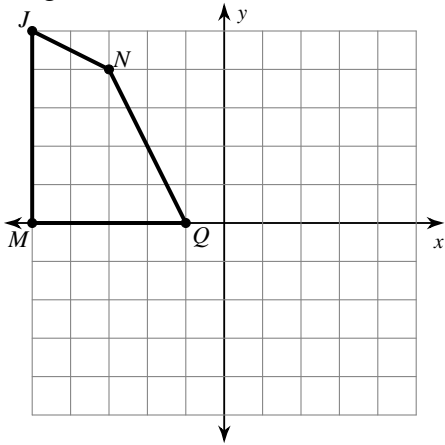
$L'(-1, 4), X'(-1, 0), H'(-2, 0), T'(-4, 1)$

14) rotation 180° about the origin



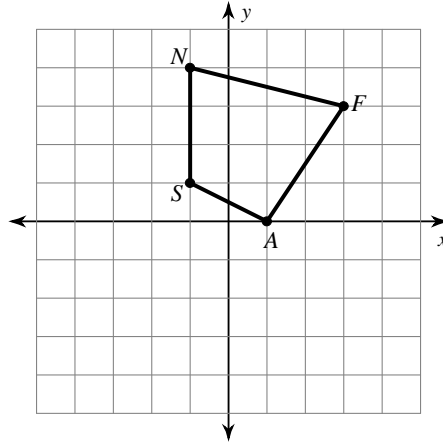
$E'(3, 1), L'(5, -2), P'(4, -4), F'(2, -4)$

15) rotation 90° counterclockwise about the origin



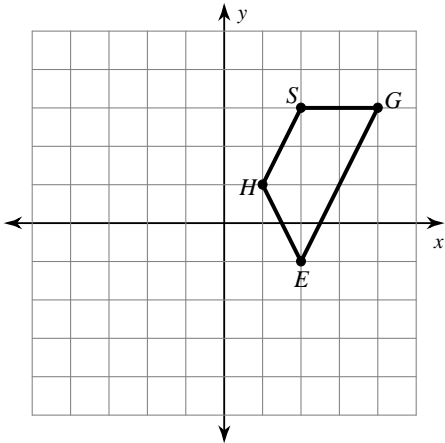
$M'(0, -5), J'(-5, -5), N'(-4, -3), Q'(0, -1)$

16) rotation 90° clockwise about the origin



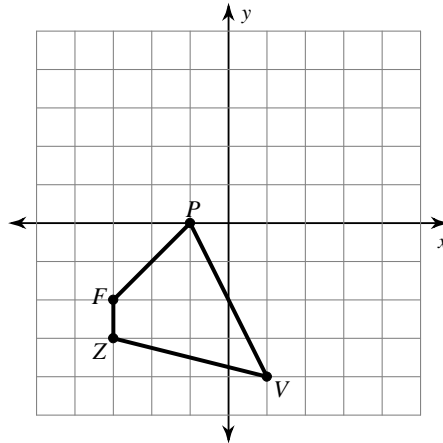
$S'(1, 1), N'(4, 1), F'(3, -3), A'(0, -1)$

17) rotation 90° clockwise about the origin



$H'(1, -1), S'(3, -2), G'(3, -4), E'(-1, -2)$

18) rotation 90° clockwise about the origin



$Z'(-3, 3), F'(-2, 3), P'(0, 1), V'(-4, -1)$