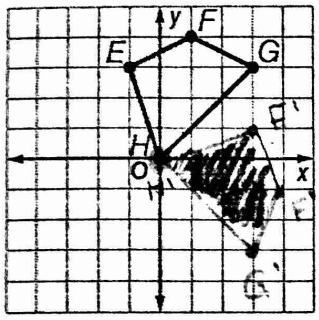
NAME _____ DATE _____ PERIOD _____

Lesson 3 Homework Practice

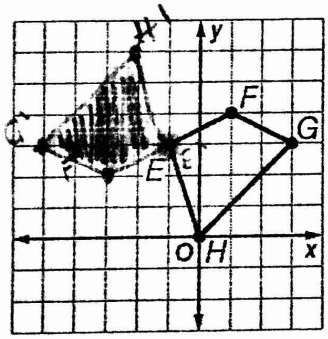
Rotations

1. 90° rotation clockwise about vertex H → is the origin.



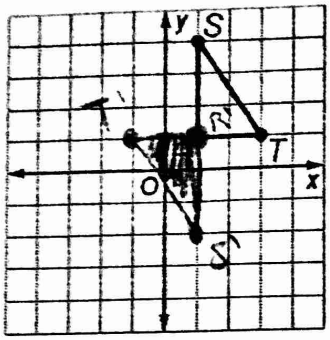
Coordinates from Vertex (not origin)	Rotation $(x,y) \to (y,-x)$	Coordinates of Image from the origin
H(0,0)	(0,0)	H'(0,0)
G(3,3)	(3,-3)	G'(3,-3)
F(1,4)	(4,-1)	F'(4,-1)
E(-1,3)	(3,1)	E'(3,1)

2. 180° counterclockwise about vertex E



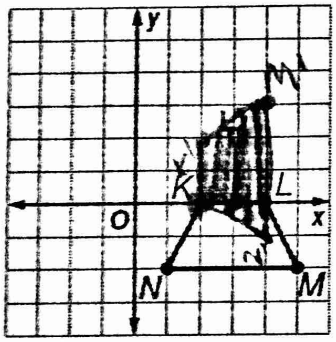
Coordinates from Vertex (not origin)	Rotation $(x,y) \to (-x,-y)$	Coordinates of Image from the origin
E(0,0)	(0,0)	E'(-1,3)
F(2,1)	(-2,-1)	F'(-3,2)
G(4,0)	(-4,0)	G'(-5,3)
H(1,-3)	(-1,3)	H'(-2,6)

3. 180° rotation about vertex R



Coordinates from Vertex (not origin)	Rotation $(x,y) \to (-x,-y)$	Coordinates of Image from the origin
R(0,0)	(0,0)	R'(1,1)
T(2,0)	(-2,0)	T'(-1,1)
S(0,3)	(0,-3)	S'(1,-2)

4. 90° counterclockwise rotation about vertex K



Coordinates from Vertex (not origin)	Rotation $(x,y) \to (-y,x)$	Coordinates of Image from the origin
K(0,0)	(0,0)	K'(2,0)
L(2,0)	(0,2)	L'(2,2)
M(3,-2)	(2,3)	M'(4,3)
N(-1,-2)	(2,-1)	N'(4,-1)