Transformations:

$r_{x-axis}(x,y) = (x,-y)$

$r_{y-axis}(x,y) = (-x,y)$

$r_{y=x}(x,y) = (y,x)$

$r_{y=-x}(x,y) = (-y,-x)$

$r_{origin}(x,y) = (-x,-y)$

$T_{a,b}(x,y) = (x+a, y+b)$

$D_k(x,y) = (kx,ky)$

$R_{90^\circ}(x,y) = (-y,x)$

$R_{180^\circ}(x,y) = (-x,-y)$

$R_{270^\circ}(x,y) = (y,-x)$

Glide reflection is composition of a reflection and a translation.

Isometry – keeps length.

Orientation – label order