9) translation: $(x, y) \rightarrow (x - 1, y - 2)$
$L(-4, -3)$, $K(0, -1)$, $J(0, -3)$

10) translation: $(x, y) \rightarrow (x - 6, y - 3)$
$N(3, 0)$, $M(3, 3)$, $L(4, 0)$

Write a rule to describe each transformation. If it's a reflection over $y = \#$ or $x = \#$, just describe

11) $S(4, 3)$, $T(4, 5)$, $U(5, 5)$
to
$T'(5, 4)$, $U'(5, 5)$, $S'(3, 4)$

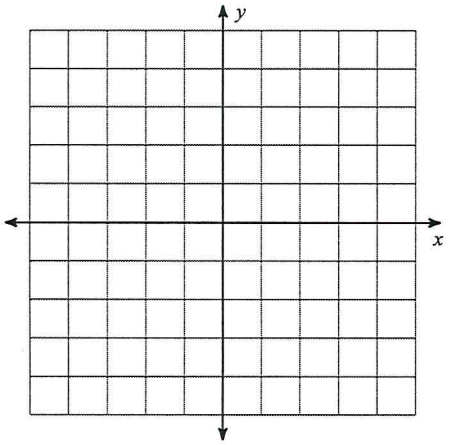
12) $F(-4, 3)$, $G(-4, 5)$, $H(-3, 3)$
to
$G'(4, 5)$, $H'(3, 3)$, $F'(4, 3)$

13) $H(-1, -3)$, $G(2, 1)$, $F(3, 0)$
to
$G'(2, 1)$, $F'(1, 0)$, $H'(5, -3)$

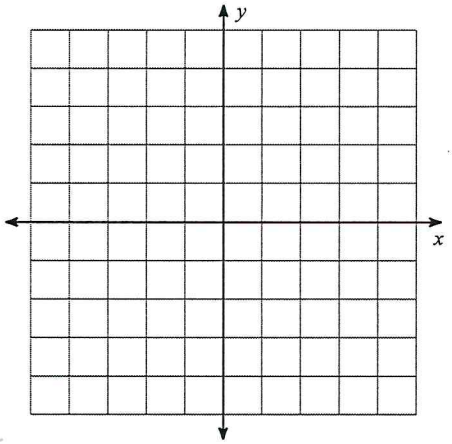
14) $P(-3, -2)$, $Q(-1, 1)$, $R(0, -4)$
to
$Q'(-1, -1)$, $R'(0, 4)$, $P'(-3, 2)$

Graph the image of the figure using the transformation given.

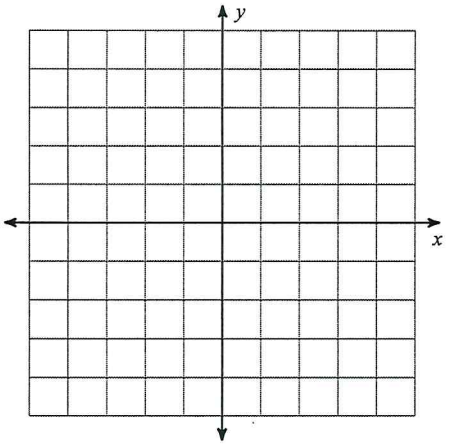
15) reflection across $y = -x$
$H(-4, -4)$, $G(-4, -3)$, $F(-3, -3)$



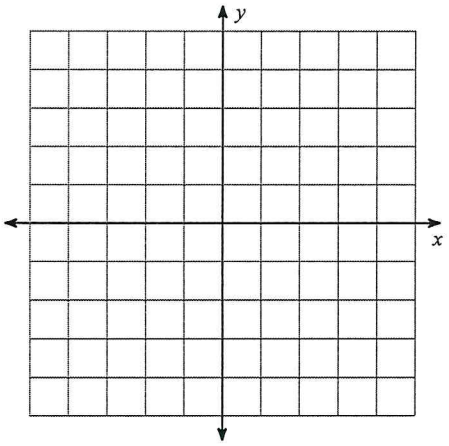
16) reflection across the x-axis
$N(-4, -2)$, $M(1, 0)$, $L(-2, -4)$



17) reflection across $y = x$
$J(0, -4)$, $K(0, 0)$, $L(5, -2)$



18) reflection across $x = -2$
$F(-4, 0)$, $G(-1, 4)$, $H(0, 2)$



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

19) reflection across $y = 3$
$V(-4, 4)$, $U(-1, 5)$, $T(-1, 2)$

20) reflection across $x = 3$
$X(2, -2)$, $W(2, 3)$, $V(4, 3)$

21) reflection across the y-axis
$J(-5, -4)$, $K(-5, 0)$, $L(-3, -5)$

22) reflection across $y = -x$
$U(-3, 1)$, $V(-2, 3)$, $W(-1, -1)$