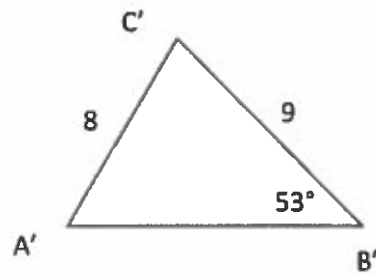
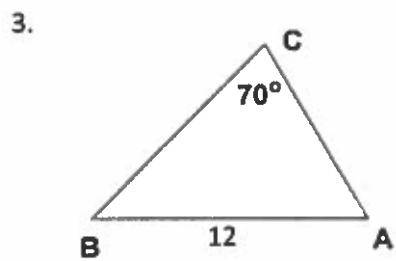
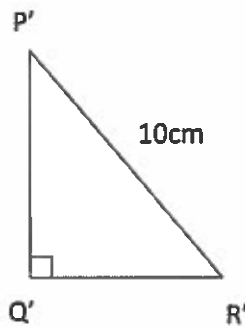
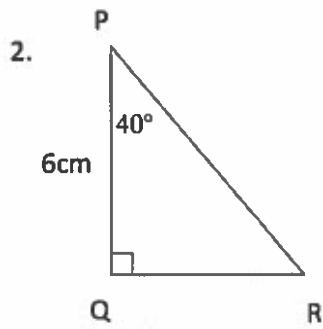
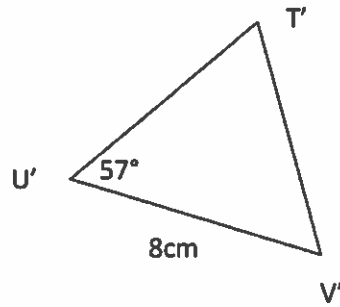
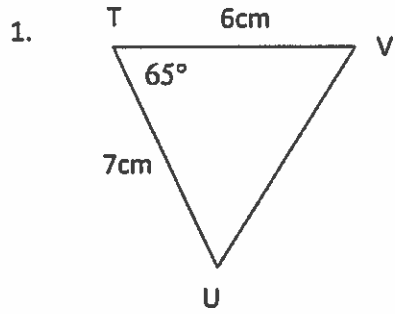


Name: _____ Date: _____

Measurements in Isometries

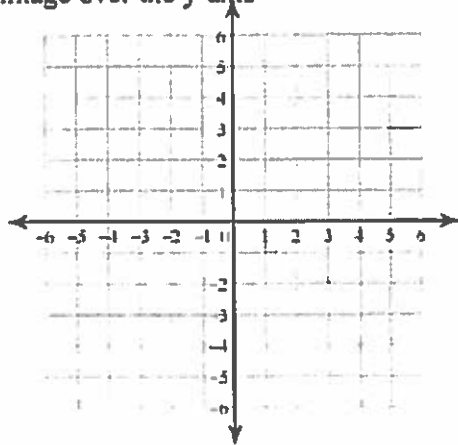
For each of the following, identify the type of transformation and find all of the missing pieces.



6) Also notice that on the notes when we did two transformations, the first image had one prime notation (one `), and the second image (after the second transformation) has two prime notations (``). This is the notation we are going to use. How many transformations would have been applied to a figure if it had four prime notations? (````)?

7) Now you are going to try some multiple transformations:

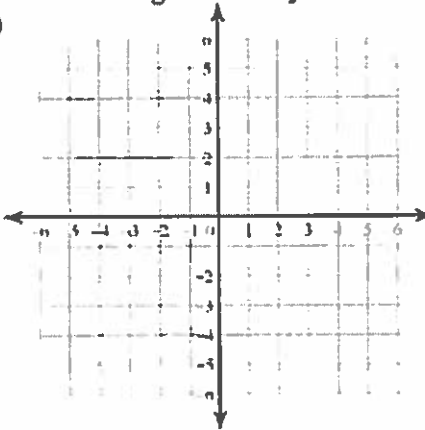
a) Translate $\triangle ALT$ if $A(-5,-1)$, $L(-3,-2)$, $T(-3,2)$ by the rule $(x,y) \rightarrow (x+6, y-3)$, then reflect the image over the y -axis



A' (____, ____)
 L' (____, ____)
 T' (____, ____)

A'' (____, ____)
 L'' (____, ____)
 T'' (____, ____)

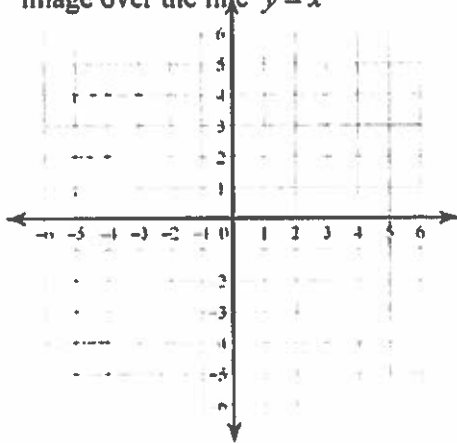
b) Reflect $\triangle TAB$ if $T(2,3)$, $A(1,1)$, and $B(4,-3)$ over the x -axis, then reflect the image over the y -axis



T' (____, ____)
 A' (____, ____)
 B' (____, ____)

T'' (____, ____)
 A'' (____, ____)
 B'' (____, ____)

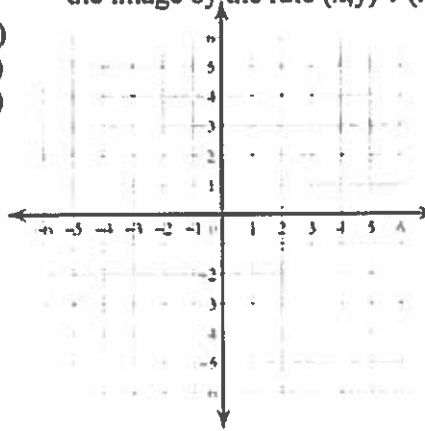
c) Rotate $\triangle ALT$ if $A(-5,-1)$, $L(-3,-2)$, $T(-3,2)$ 90° clockwise about the origin, then reflect the image over the line $y = x$



A' (____, ____)
 L' (____, ____)
 T' (____, ____)

A'' (____, ____)
 L'' (____, ____)
 T'' (____, ____)

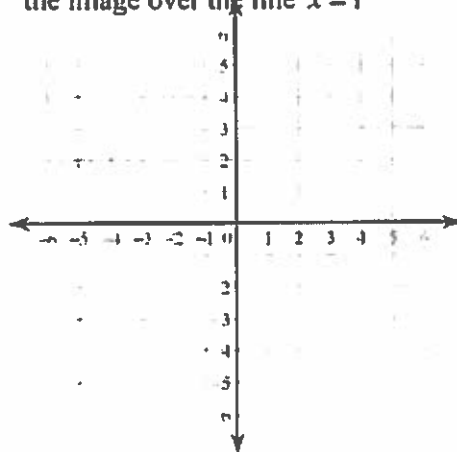
d) Reflect $\triangle TAB$ if $T(2,3)$, $A(1,1)$, and $B(4,-3)$ over the y -axis, then translate the image by the rule $(x,y) \rightarrow (x+2, y-1)$



T' (____, ____)
 A' (____, ____)
 B' (____, ____)

T'' (____, ____)
 A'' (____, ____)
 B'' (____, ____)

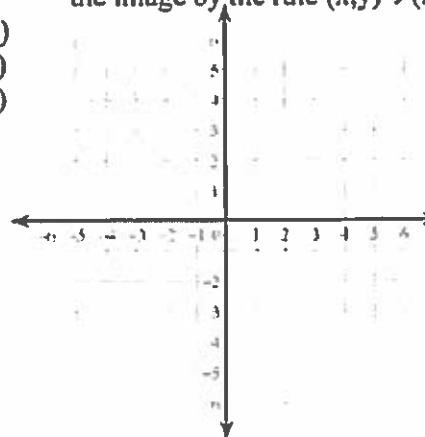
e) Rotate $\triangle ALT$ if $A(-5,-1)$, $L(-3,-2)$, $T(-3,2)$ 180° clockwise about the point $(-1,-1)$, then reflect the image over the line $x = 1$



A' (____, ____)
 L' (____, ____)
 T' (____, ____)

A'' (____, ____)
 L'' (____, ____)
 T'' (____, ____)

f) Reflect $\triangle TAB$ if $T(2,3)$, $A(1,1)$, and $B(4,-3)$ over the line $y = 2$, then translate the image by the rule $(x,y) \rightarrow (x-5, y-4)$



T' (____, ____)
 A' (____, ____)
 B' (____, ____)

T'' (____, ____)
 A'' (____, ____)
 B'' (____, ____)