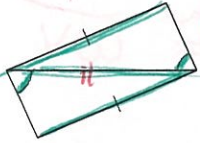
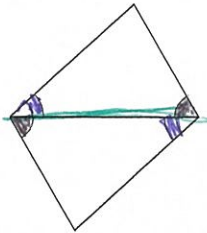
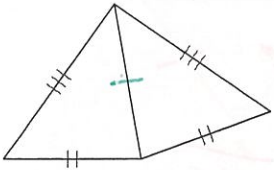


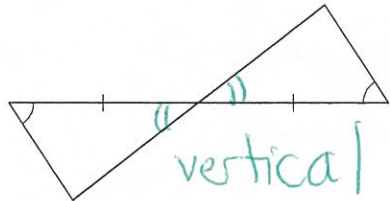
SSS, SAS, ASA, and AAS Congruence

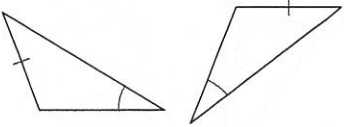
State if the two triangles are congruent. If they are, state how you know.

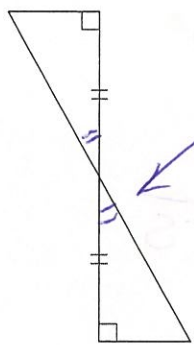
1)  **SSA**
NOT Congruent

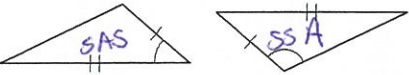
2)  **SAS**

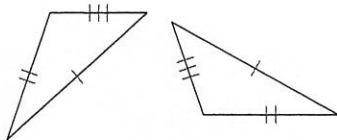
3)  **SSS**

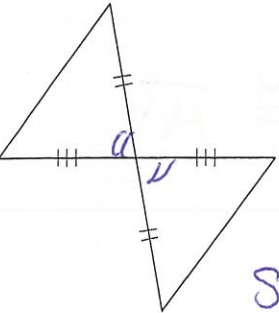
4)  **ASA**
vertical angles

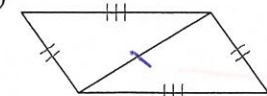
5)  **NO**
NOT ENOUGH INFO!

6)  **ASA**

7)  **SSA**
NOT Congruent

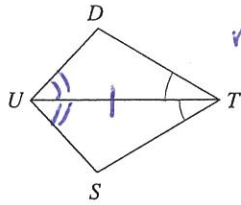
8)  **SSS**

9)  **SAS**

10)  **SSS**

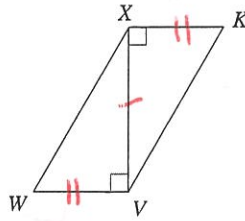
State what additional information is required in order to know that the triangles are congruent for the reason given.

11) ASA



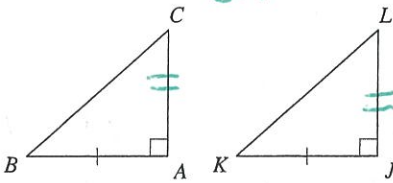
$m\angle DUT \cong m\angle SUT$

12) SAS



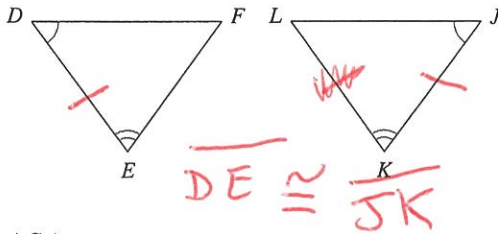
$\overline{XW} \cong \overline{XV}$

13) SAS



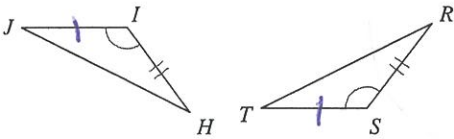
$\overline{CA} \cong \overline{LJ}$

14) ASA



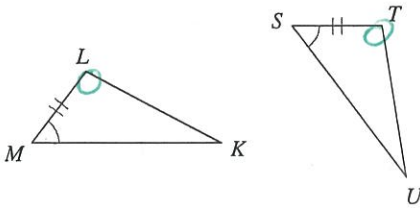
$\overline{DE} \cong \overline{JK}$

15) SAS



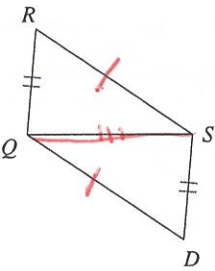
$\overline{JI} \cong \overline{TS}$

16) ASA



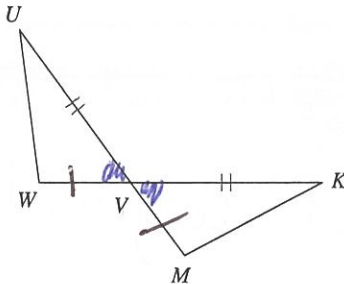
$m\angle L \cong m\angle T$

17) SSS



$\overline{RS} \cong \overline{DQ}$

18) SAS

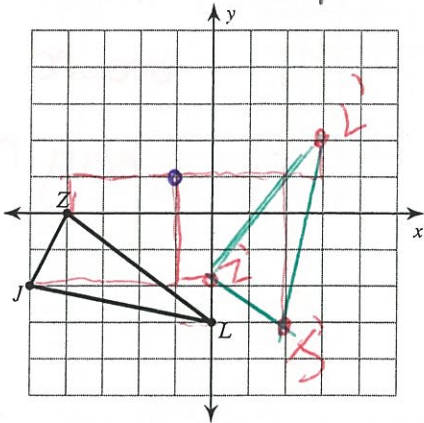


$\overline{WV} \cong \overline{MV}$

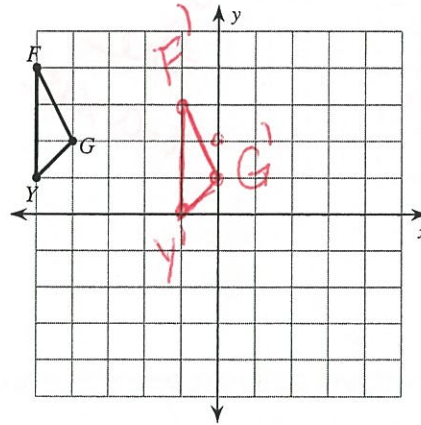
All Transformations

Graph the image of the figure using the transformation given.

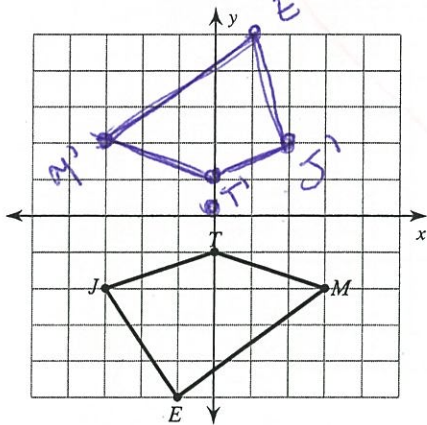
1) rotation 90° counterclockwise about the ~~origin~~ point $(-1, 1)$



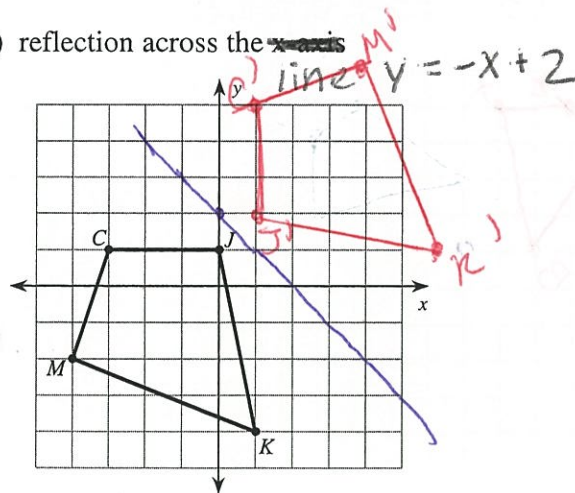
2) translation: 4 units right and 1 unit down



3) ~~translation: 1 unit right and 1 unit up~~ rotation 180° about the origin

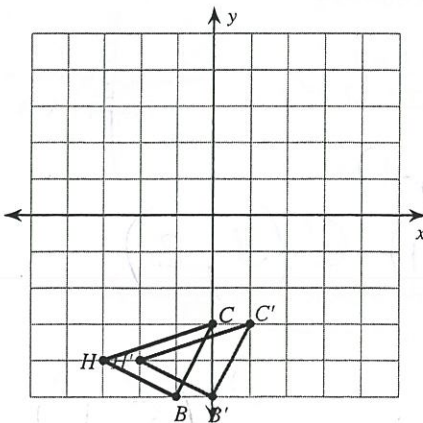


4) reflection across the ~~x-axis~~ line $y = -x + 2$



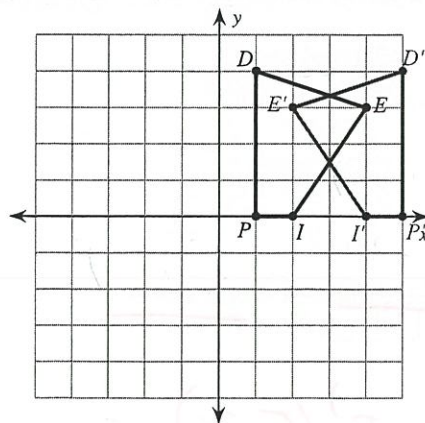
Write a rule to describe each transformation.

5)



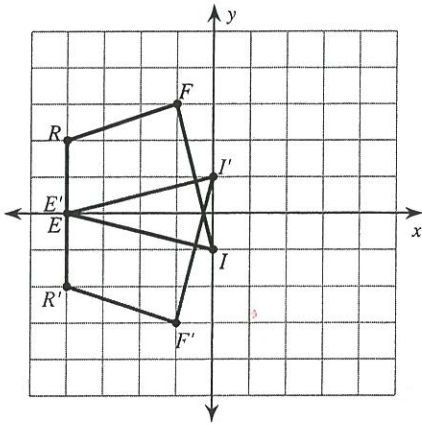
$(x, y) \rightarrow (x + 1, y)$

6)



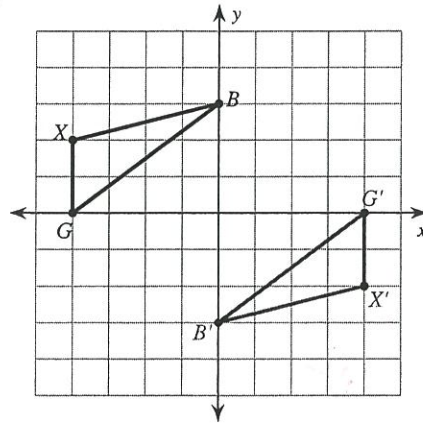
reflect over $x = 3$

7)



reflect over the x-axis.

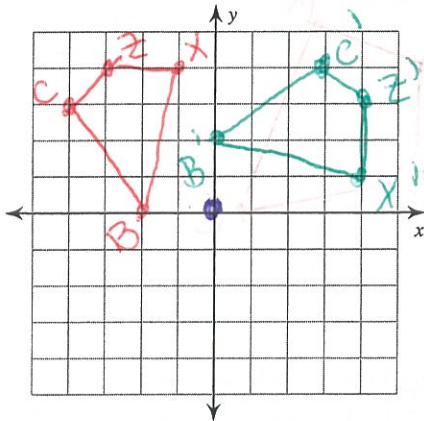
8)



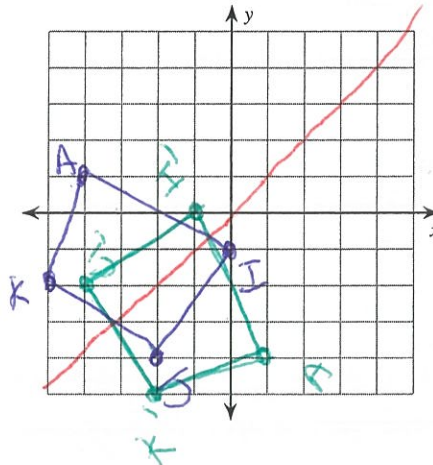
rotate 180° around the origin

Graph the image of the figure using the transformation given.

9) rotation 90° clockwise about the origin
 $B(-2, 0), C(-4, 3), Z(-3, 4), X(-1, 4)$



10) reflection across $y = x$
 $K(-5, -2), A(-4, 1), I(0, -1), J(-2, -4)$



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

11) rotation 180° about the origin
 $E(2, -2), J(1, 2), R(3, 3), S(5, 2)$



$E'(-2, 2), J'(-1, 2)$

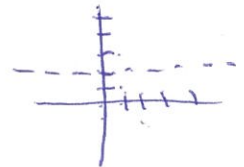
$R'(-3, -3), S'(-5, -2)$

13) translation: 7 units right and 1 unit down
 $J(-3, 1), F(-2, 3), N(-2, 0)$

$J'(4, 0) \quad F'(5, 2)$

$N'(5, -1)$

12) reflection across $y = 2$
 $J(1, 3), U(0, 5), R(1, 5), C(3, 2)$



$J'(1, 1) \quad U'(0, -1)$

$R'(1, -1) \quad C'(3, 2)$

14) translation: 6 units right and 3 units down
 $S(-3, 3), C(-1, 4), W(-2, -1)$

$S'(3, 0) \quad C'(5, 1)$

$W'(4, -4)$