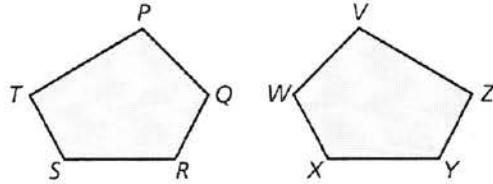


## 2.1-2.4 – Review

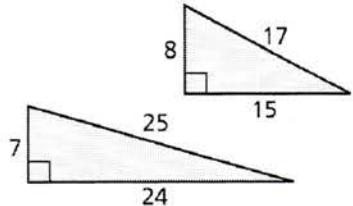
- 1) The figures are congruent. Name the corresponding angles and the corresponding sides.



| <u>Corresponding Sides</u>          | <u>Corresponding Angles</u> |
|-------------------------------------|-----------------------------|
| $\overline{PQ} \cong \overline{VW}$ | $\angle T \cong \angle Z$   |
| $\overline{QR} \cong \overline{WX}$ | $\angle P \cong \angle V$   |
| $\overline{RS} \cong \overline{XY}$ | $\angle Q \cong \angle W$   |
| $\overline{ST} \cong \overline{YZ}$ | $\angle R \cong \angle X$   |
| $\overline{TP} \cong \overline{ZY}$ | $\angle S \cong \angle Y$   |

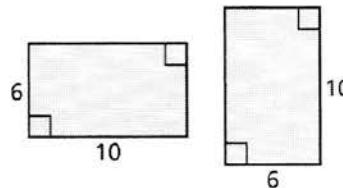
Tell whether the two figures are congruent. Explain your reasoning.

2)



No.  
The sides are  
not  $\cong$ .

3)



Yes. Corresponding  
angles and sides  
are  $\cong$ .

- 4) The pentagons are congruent. Determine whether the statement is *true* or *false*.

a.  $\angle B$  is congruent to  $\angle C$ .

*T*

b. Side  $MN$  is congruent to side  $AE$ .

*F*

c.  $\angle B$  corresponds to  $\angle O$ .

*F*

d. Side  $BC$  is congruent to side  $PO$ .

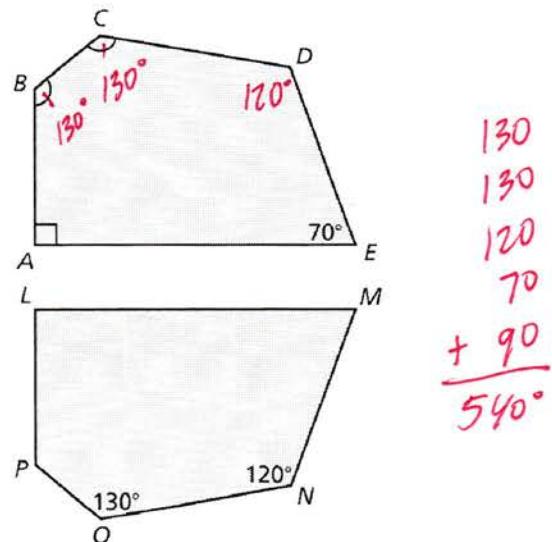
*T*

e. The sum of the angle measures of  $LMNOP$  is  $540^\circ$ .

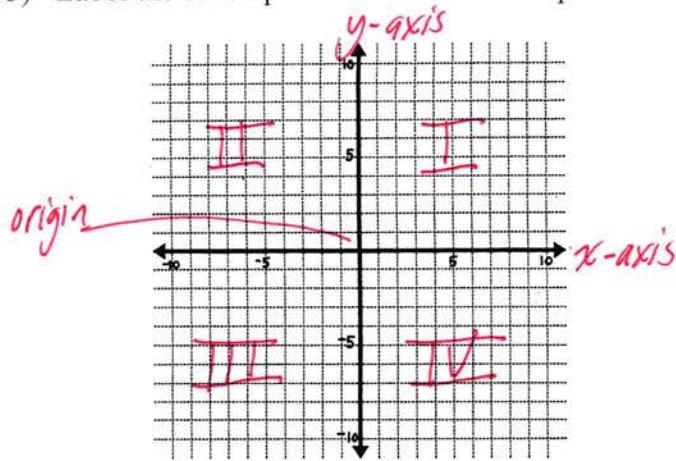
*T*

f. The measure of  $\angle B$  is  $120^\circ$ .

*F*

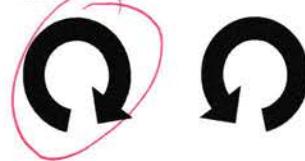


- 5) Label the seven parts of the coordinate plane:

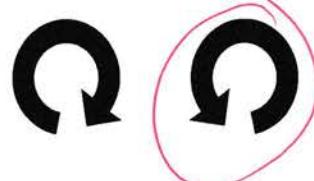


- 6) Circle the correct direction for the following:

a) Clockwise

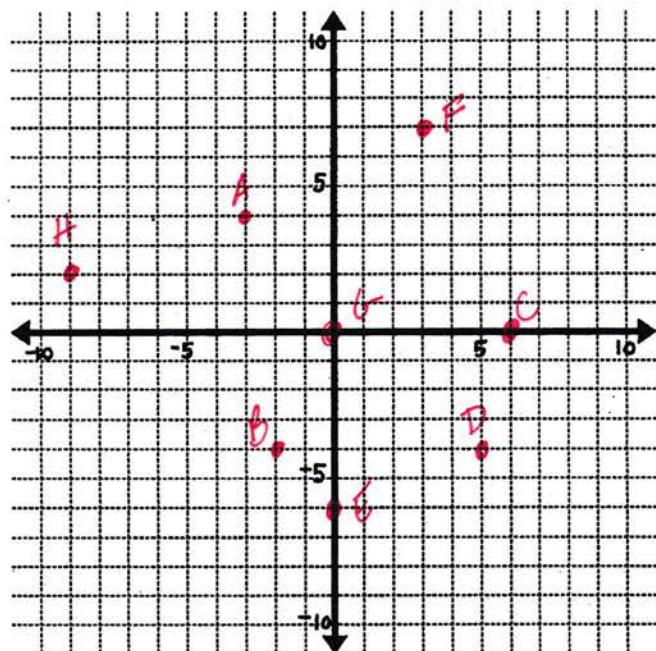


b) Counter-clockwise



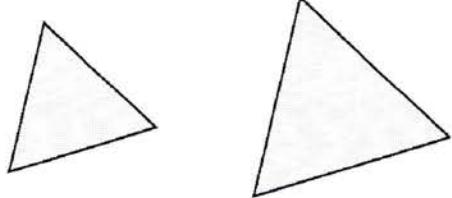
- 7) Plot the following ordered pairs (coordinates) on the coordinate plane. Make sure you label the points.  
After plotting, indicate the location of the point (ie: which quadrant or axis it lies on)

|           |               |
|-----------|---------------|
| A(-3, 4)  | <u>II</u>     |
| B(-2, -4) | <u>III</u>    |
| C(6, 0)   | <u>x-axis</u> |
| D(5, -4)  | <u>IV</u>     |
| E(0, -6)  | <u>y-axis</u> |
| F(3, 7)   | <u>I</u>      |
| G(0, 0)   | <u>origin</u> |
| H(-9, 2)  | <u>II</u>     |



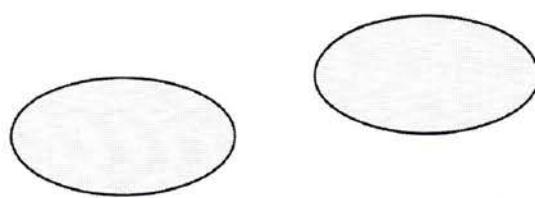
Tell whether the right figure is a translation of the left figure. Explain your reasoning.

8)



No. The size changes

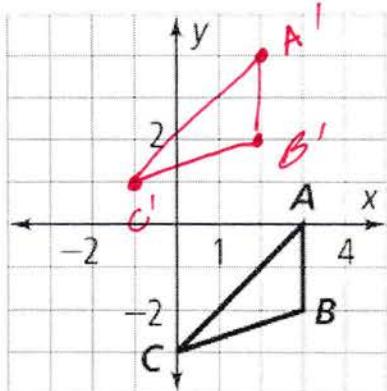
9)



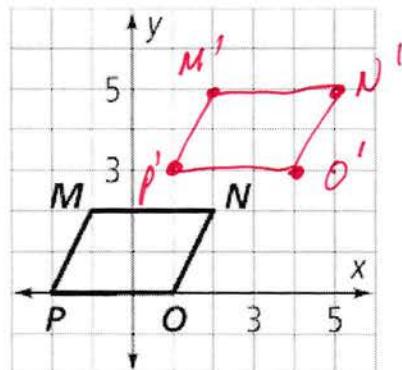
Yes. When the slide happens, it remains the same

Graph the image of each figure under the given translation.

- 10) Left 1 unit, Up 4 units

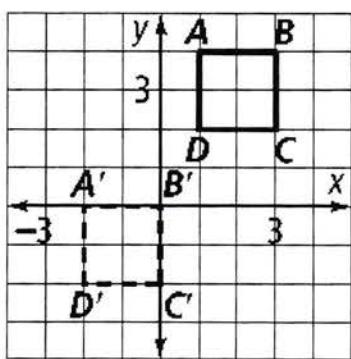


- 11) Right 3 units, Up 3 units

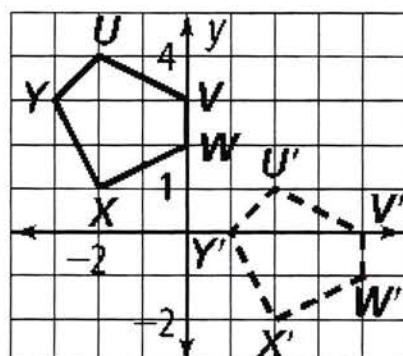


The dashed-line figure is a translation image of the solid-line figure. Describe the translation. (How much did it move left or right? How much did it move up or down?)

- 12) Left 3, Down 4

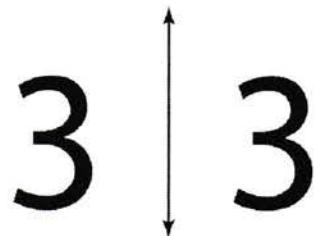


- 13) Right 4, Down 3



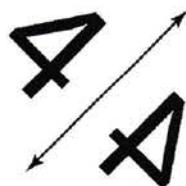
Tell whether the one figure is a reflection of the other figure. Explain your reasoning.

- 14)



No. Not a mirror image.

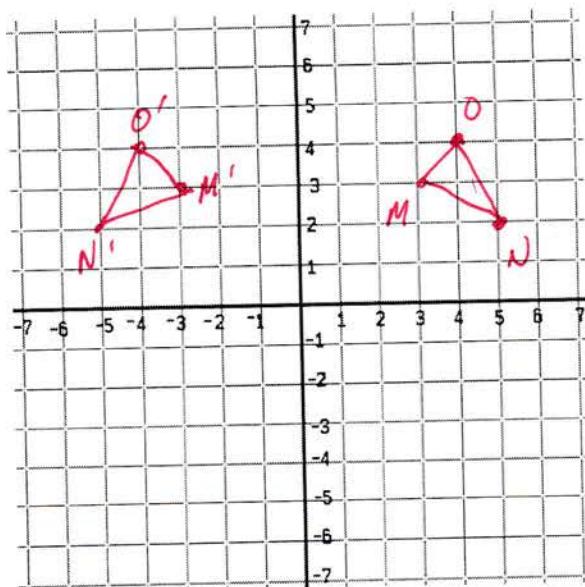
- 15)



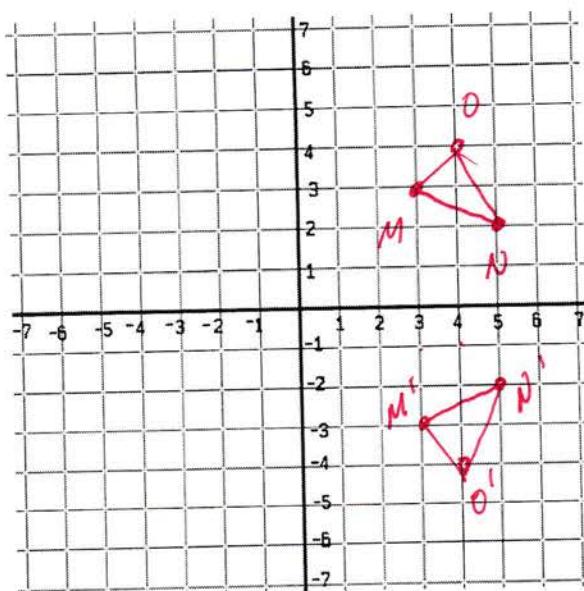
Yes. Mirror image

Given points  $M(3, 3)$ ,  $N(5, 2)$ , and  $O(4, 4)$ , graph  $\Delta MNO$  and its reflection image across each line

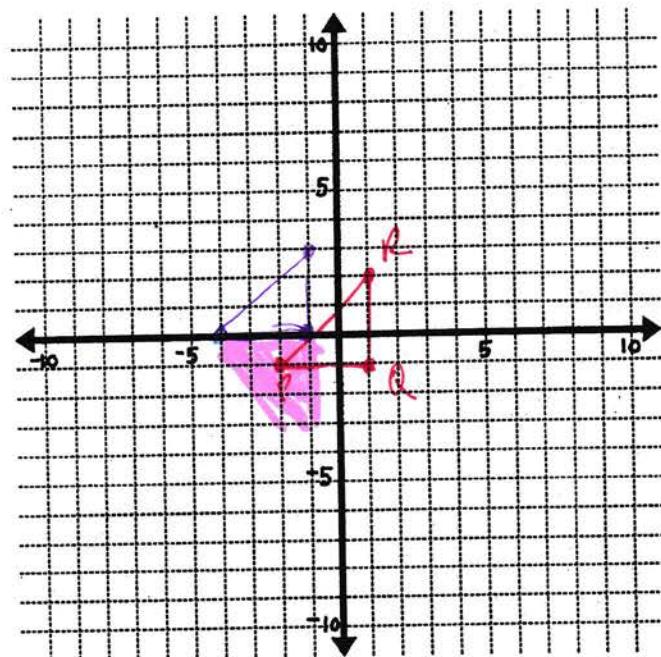
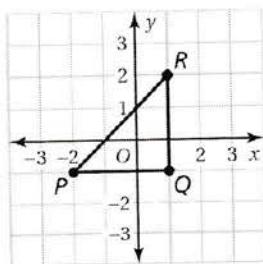
- 16) the  $y$ -axis



- 17) the  $x$ -axis

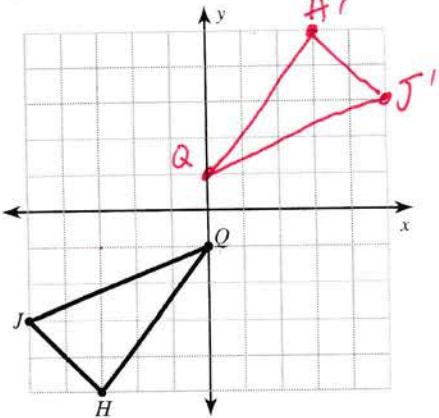


- 18) Copy the following in the bigger coordinate plane. Afterwards, translate the triangle 2 units left and 1 unit up. Then reflect the image in the  $x$ -axis. Graph the resulting triangle.

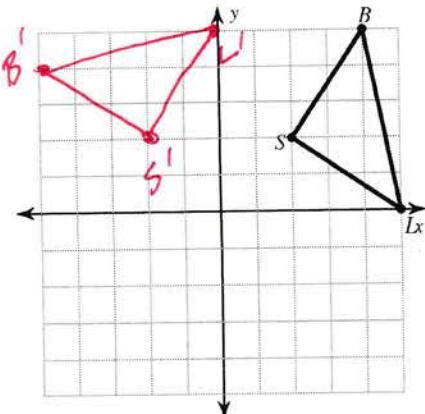


Graph the following:

- 19) rotation  $180^\circ$  about the origin



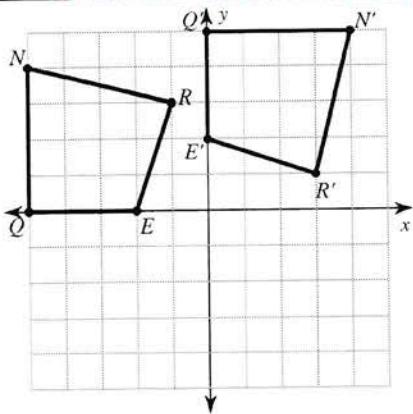
- 20) rotation  $90^\circ$  counterclockwise about the origin



Describe each rotation around the origin.

- 21)

Rotation Clockwise  $90^\circ$



- 22)

Rotation  $180^\circ$

