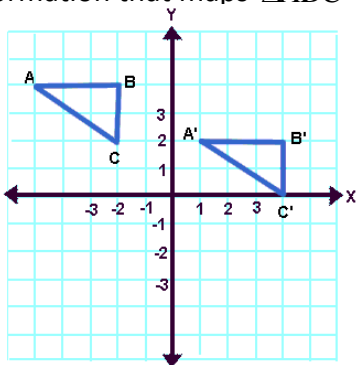


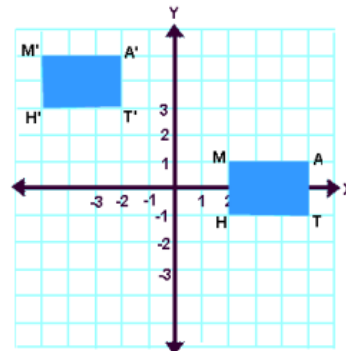
AIM: HOW DO WE EVALUATE TRANSLATIONS AND REFLECTIONS ON THE COORDINATE PLANE?

Translations:

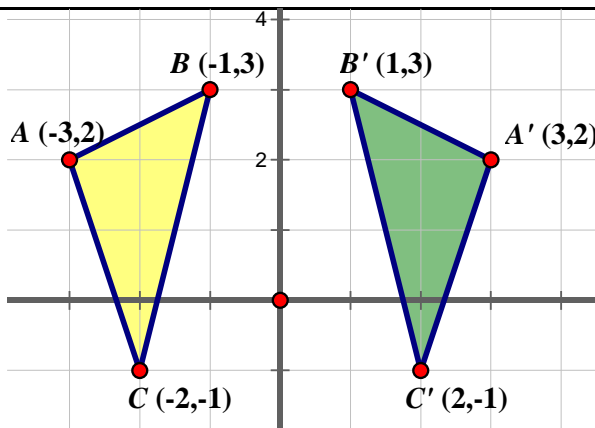
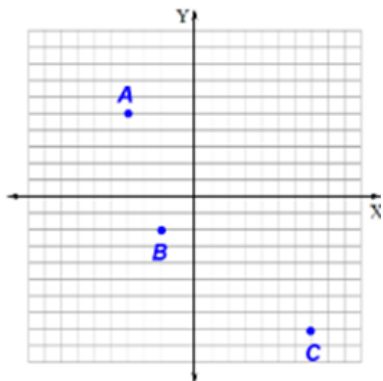
1. Describe the transformation that maps $\triangle ABC$ onto $\triangle A'B'C'$.



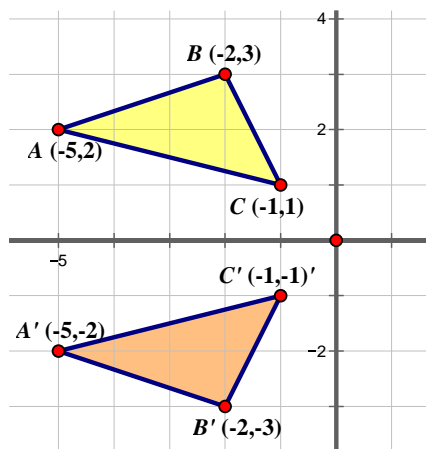
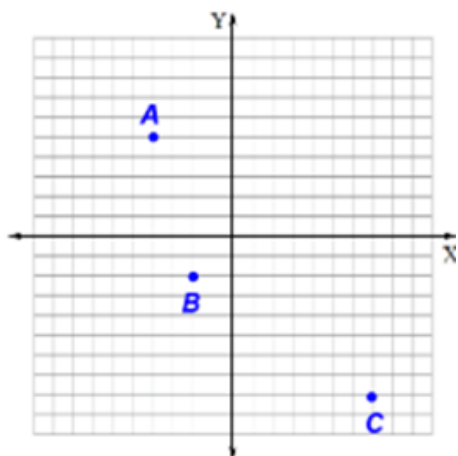
2. Describe the transformation that maps $MATH$ onto $M'A'T'H'$.



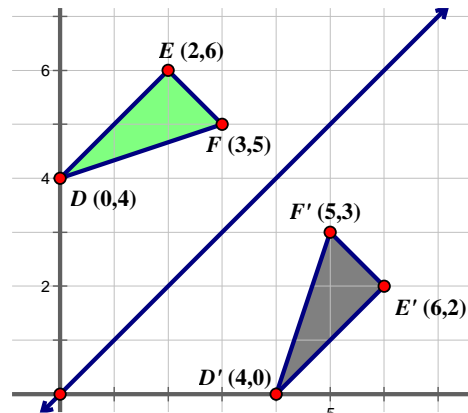
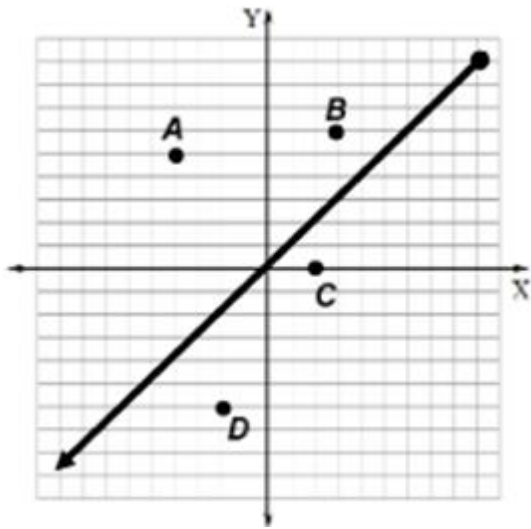
Reflection over the y axis:



Reflection over the x axis:

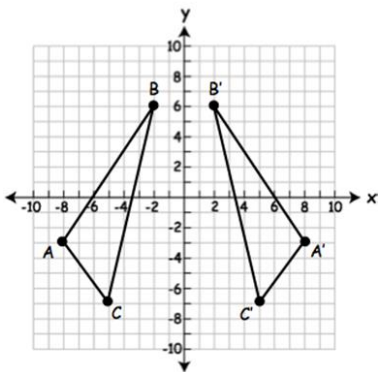


Reflection over $y = x$:

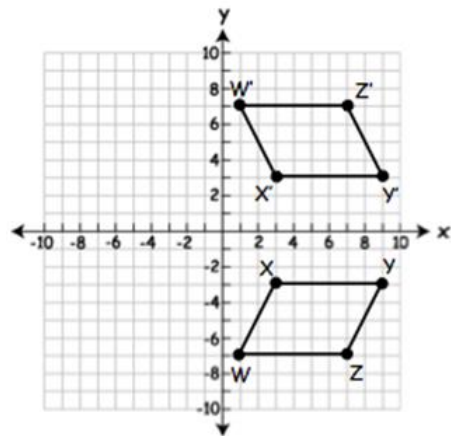


PRACTICE: Given the examples below describe the reflection that would map the preimage onto its image.

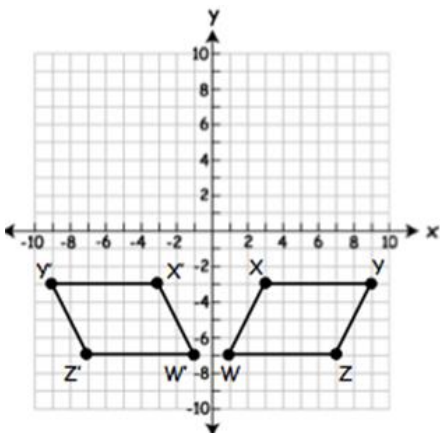
1.



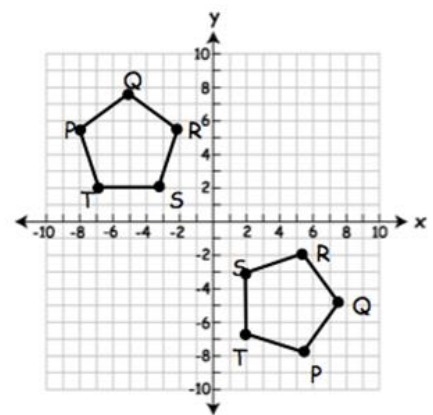
2.



3.

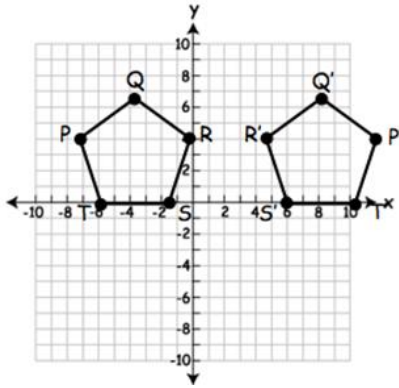


4.

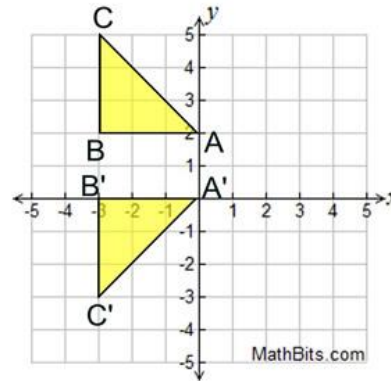


5. Directions: Write the equation for the line of reflection in the examples below.

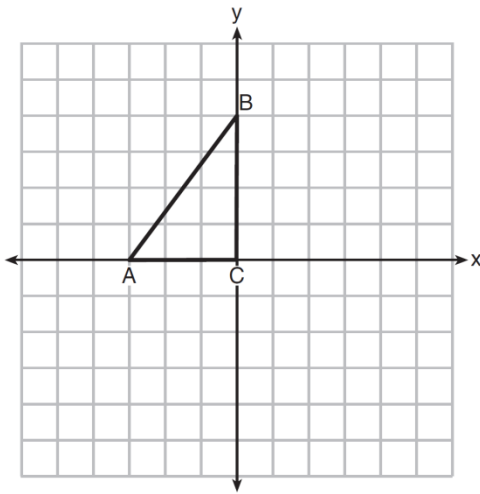
a) _____



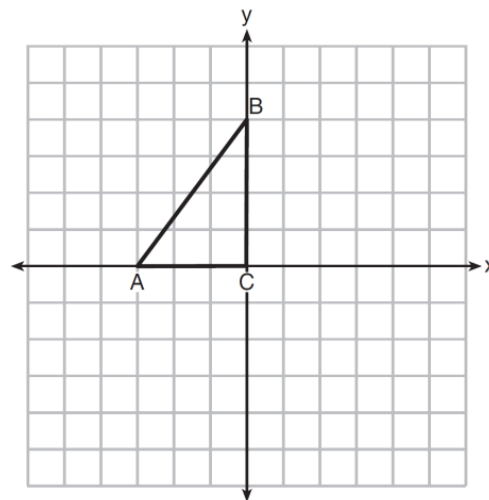
b) _____



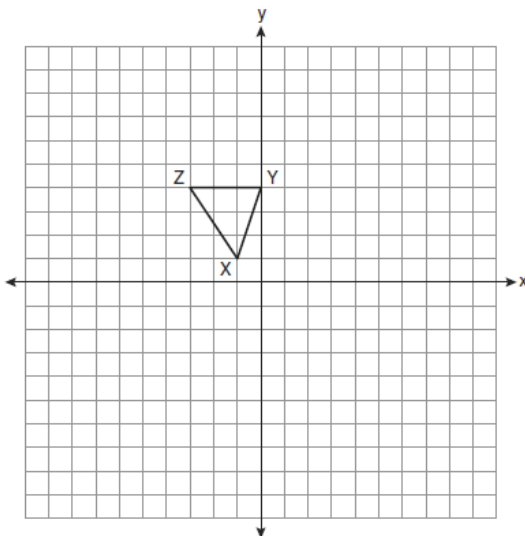
6. Triangle ABC is graphed on the set of axes below. Graph and label $\triangle A'B'C'$, the image of $\triangle ABC$ after a reflection over the line $x = 1$.



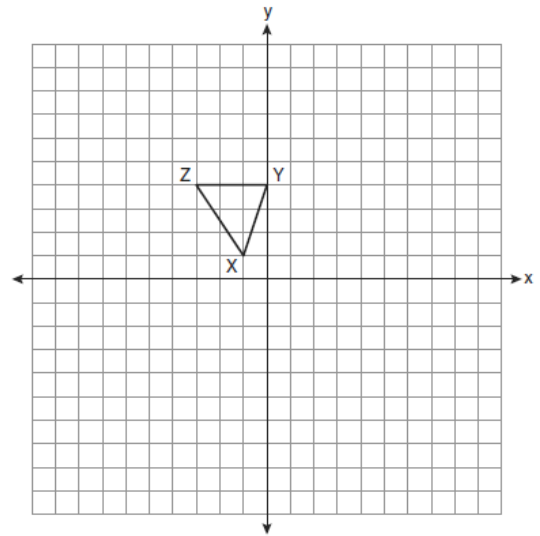
7. Triangle ABC is graphed on the set of axes below. Graph and label $\triangle A'B'C'$, the image of $\triangle ABC$ after a reflection over the line $y = -1$.



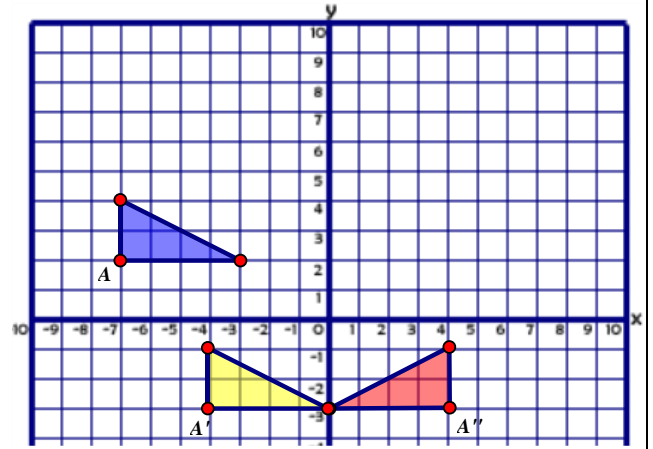
8. Triangle XYZ , shown in the diagram below, is reflected over the line $x = 2$. State the coordinates of $\triangle X'Y'Z'$, the image of $\triangle XYZ$.



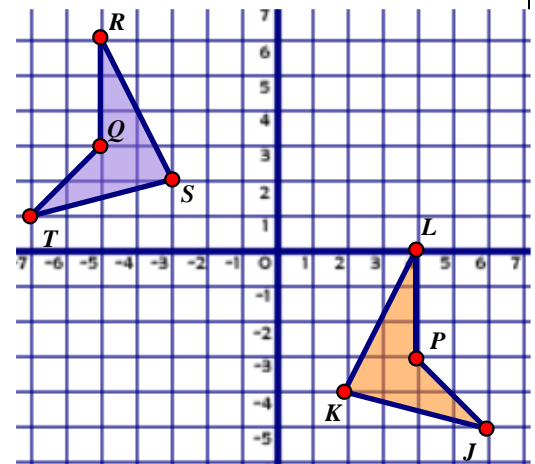
9. Triangle XYZ , shown in the diagram below, is reflected over the line $y = 4$. State the coordinates of $\triangle X'Y'Z'$, the image of $\triangle XYZ$.



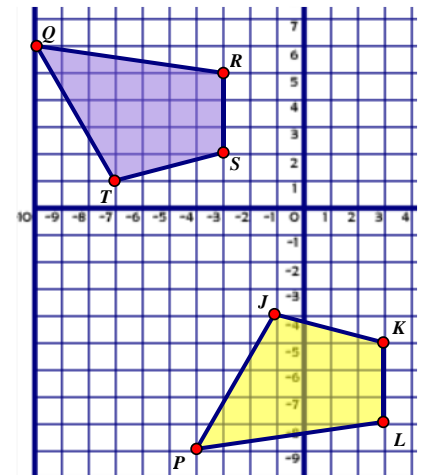
10. Describe a sequence of transformations that maps triangle ABC onto triangle $A'B'C'$.



11. Describe a sequence of transformations that maps quadrilateral $QRST$ onto quadrilateral $PLKJ$.



12. Describe a sequence of transformations that maps quadrilateral $QRST$ onto quadrilateral $PLKJ$.



UNIT 2

LESSON 2 HOMEWORK

Given the examples below describe the reflection or translation that would map the preimage onto its image.

<p>1)</p>	<p>2)</p>	<p>3)</p>
<p>4)</p>	<p>5)</p>	<p>6)</p>
<p>7)</p>	<p>8)</p>	<p>9)</p>

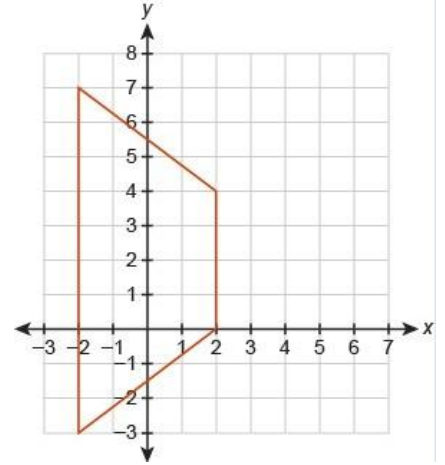
Name: _____

Date: _____

UNIT 2

LESSON 2 EXIT TICKET

What is the equation for the line of reflection that maps the shape onto itself?



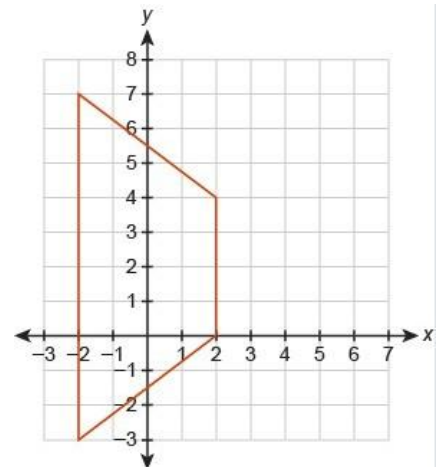
Name: _____

Date: _____

UNIT 2

LESSON 2 EXIT TICKET

What is the equation for the line of reflection that maps the shape onto itself?



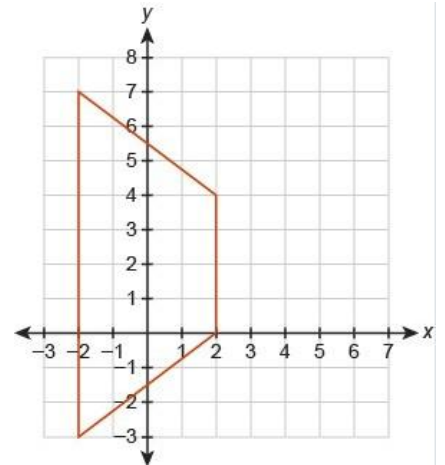
Name: _____

Date: _____

UNIT 2

LESSON 2 EXIT TICKET

What is the equation for the line of reflection that maps the shape onto itself?



not relevant to this lesson- change question!