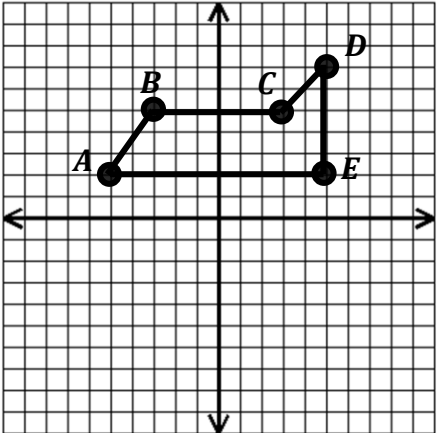
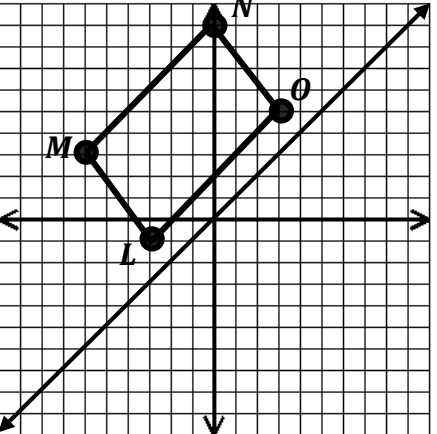
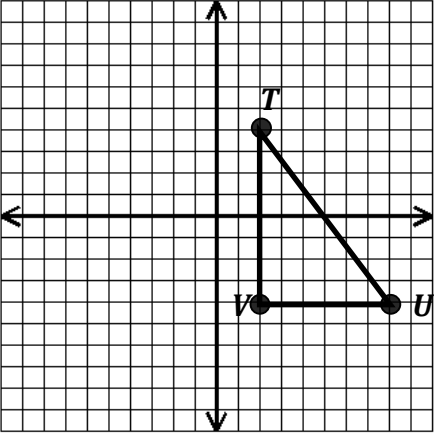



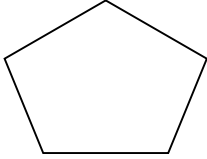
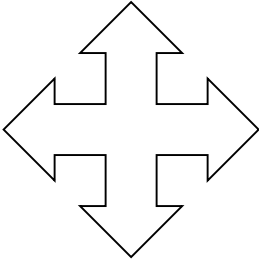
TRANSFORMATIONS

REFLECTIONS & LINES OF SYMMETRY

DRAW the reflection of each of the following figures across the axis/line indicated, and list the new coordinates.

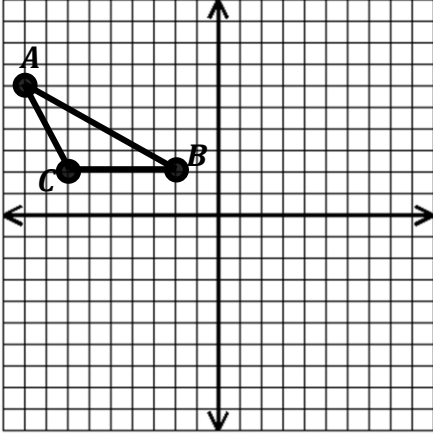
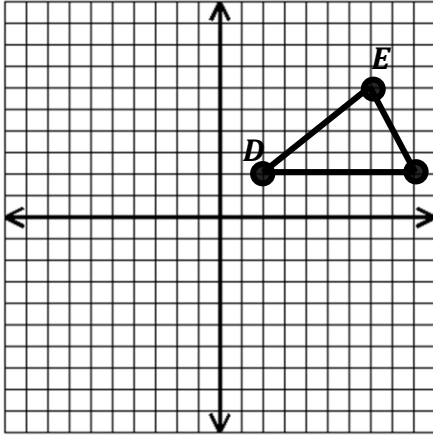
<p>1. $A'(\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$</p> <p>$B'(\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$</p> <p>$C'(\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$</p> <p>$D'(\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$</p> <p>$E'(\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$</p>	<p>Reflect across the $x - axis$:</p> 
<p>2. $L'(\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$</p> <p>$M'(\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$</p> <p>$N'(\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$</p> <p>$O'(\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$</p>	<p>Reflect across $y = x$:</p> 
<p>3. $T'(\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$</p> <p>$U'(\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$</p> <p>$V'(\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$</p>	<p>Reflect across the $y - axis$:</p> 

Tell how many lines of symmetry each of the following objects has.

<p>4. _____</p>	
<p>5. _____</p>	
<p>6. _____</p>	

TRANSLATIONS & ROTATIONS

DRAW the indicated translation of each polygon below, then state the new coordinates of each vertex.

<p>7. A'(_____, _____)</p> <p>B'(_____, _____)</p> <p>C'(_____, _____)</p>	<p>8 right, 8 down:</p> 
<p>8. D'(_____, _____)</p> <p>E'(_____, _____)</p> <p>F'(_____, _____)</p>	<p>6 left, 2 up</p> 

Tell whether rotating each letter 90° clockwise would produce a letter of the alphabet. If yes, name the letter.

9. YES or NO Letter:	H
10. YES or NO Letter:	M
11. YES or NO Letter:	O
12. YES or NO Letter:	X

Use the polygon below to perform the rotation indicated. Give the coordinates of the rotated polygon. WHEN PERFORMING EACH ROTATION, GO BACK TO THE ORIGINAL POLYGON.

13. 90° clockwise:

A' (____, ____)

B' (____, ____)

C' (____, ____)

D' (____, ____)

E' (____, ____)

14. 180° :

A' (____, ____)

B' (____, ____)

C' (____, ____)

D' (____, ____)

E' (____, ____)

15. 90° counter-clockwise:

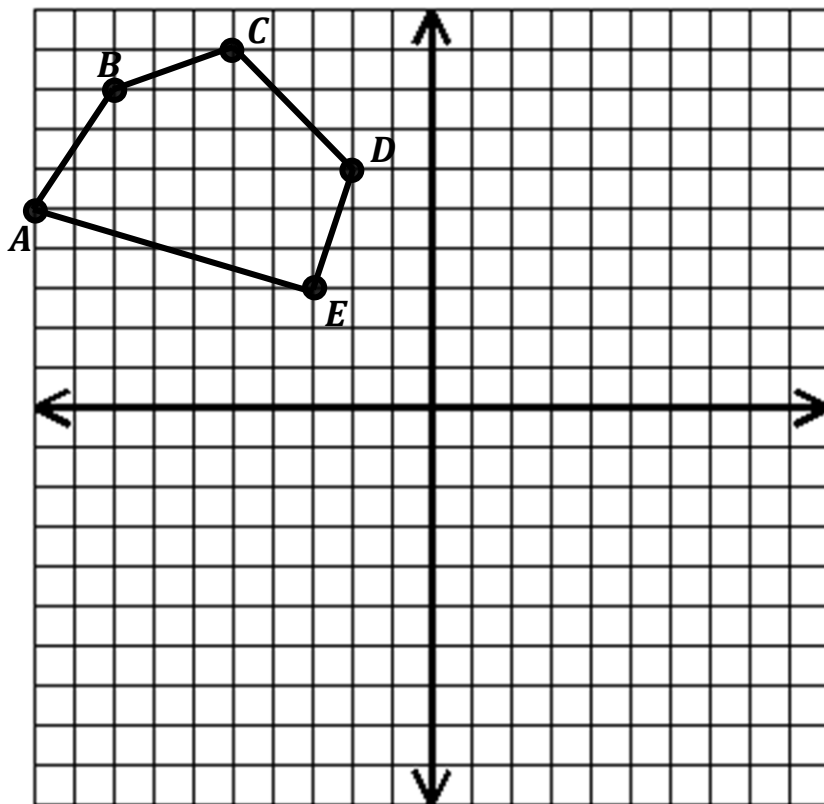
A' (____, ____)

B' (____, ____)

C' (____, ____)

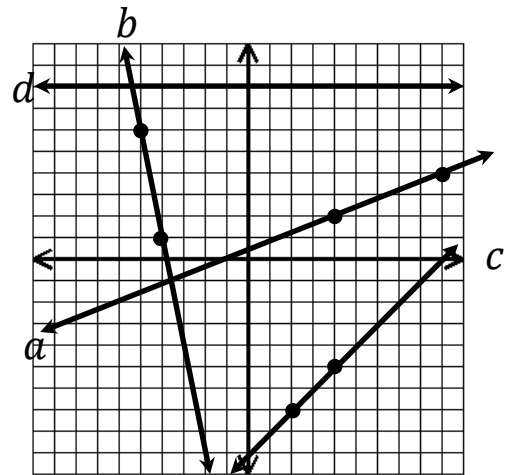
D' (____, ____)

E' (____, ____)



DILATIONS WITH SLOPE

16. _____	Slope of a
17. _____	Slope of b
18. _____	Slope of c
19. _____	Slope of d



Using the given scale factor and center, dilate the following figures and state the new coordinates.

<p>20. B'(_____, _____)</p> <p>C'(_____, _____)</p>	<p>Scale Factor: 3; Center: A</p>	
<p>21. S'(_____, _____)</p> <p>R'(_____, _____)</p>	<p>Scale Factor: 2; Center: T</p>	
<p>22. M'(_____, _____)</p> <p>O'(_____, _____)</p>	<p>Scale Factor: $\frac{1}{2}$; Center: N</p>	