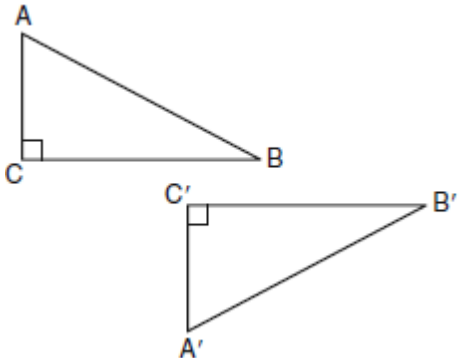
NAME:_____

1. 080915ge, P.I. G.G.56
In the diagram below, which transformation was used to map $\Delta ABC$ to $\Delta A'B'C'$?




[A] dilation [B] reflection
[C] glide reflection [D] rotation

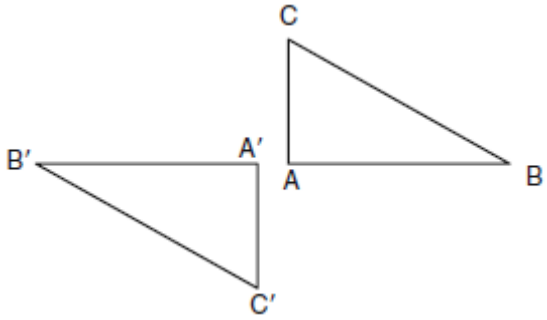
2. 080906ge, P.I. G.G.59
Which transformation produces a figure similar but *not* congruent to the original figure?

[A] $T_{1,3}$ [B] $D_{\frac{1}{2}}$ [C] $R_{90°}$ [D] $r_{y=x}$

3. 080908b, P.I. G.G.61
Which type of transformation is $(x, y) \rightarrow (x+2, y-2)$?

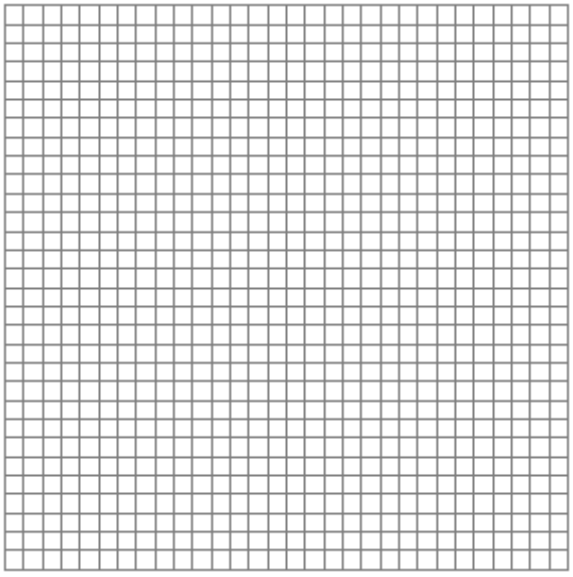
[A] rotation [B] reflection
[C] dilation [D] translation

4. 060903ge, P.I. G.G.56
In the diagram below, under which transformation will $\Delta A'B'C'$ be the image of $\Delta ABC$?




[A] dilation [B] rotation
[C] translation [D] glide reflection

5. fall0830ge, P.I. G.G.55
The vertices of $\Delta ABC$ are $A(3,2)$, $B(6,1)$, and $C(4,6)$. Identify and graph a transformation of $\Delta ABC$ such that its image, $\Delta A'B'C'$, results in $\overline{AB} \parallel \overline{A'B'}$.



NAME:_____

6. 080801b, P.I. G.G.54

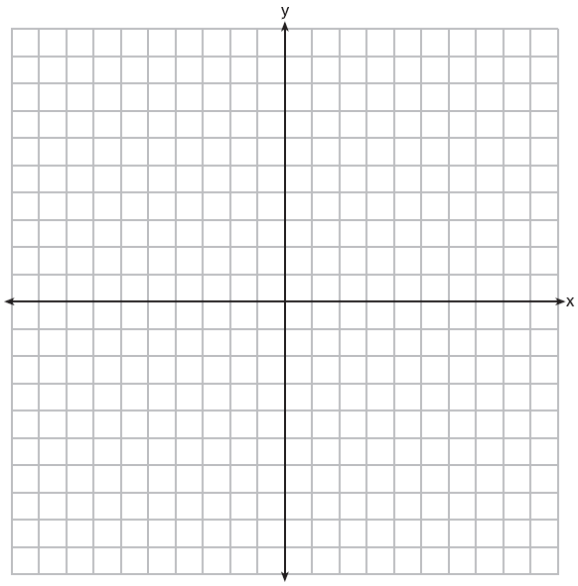
Which transformation of $y = 2^x$ results in the function $y = 2^x - 2$?

[A] $r_{y-\text{axis}}$ [B] $T_{0,-1}$

[C] $T_{0,-2}$ [D] $r_{x-\text{axis}}$

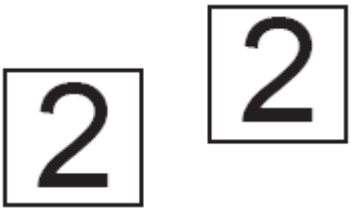
7. 080838a, P.I. G.G.61

On the accompanying set of axes, draw $\Delta ABC$, whose coordinates are $A(-7,9)$, $B(-2,8)$, and $C(-3,4)$. Then draw, label, and state the coordinates of $\Delta A'B'C'$, the image of $\Delta ABC$ after the transformation that maps $(x,y)$ to $(-x,-y)$. Based on your diagram, identify the type of transformation that was performed.




8. 060812a, P.I. G.G.56

Which transformation is illustrated by the accompanying diagram?




[A] rotation [B] dilation

[C] reflection [D] translation

9. 010809a, P.I. G.G.54

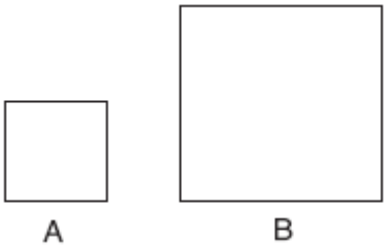
Which transformation produces a figure that is always the mirror image of the original figure?

[A] dilation [B] translation

[C] line reflection [D] rotation

10. 010804a, P.I. G.G.60

In the accompanying diagram, figure *B* is the image of figure *A*.



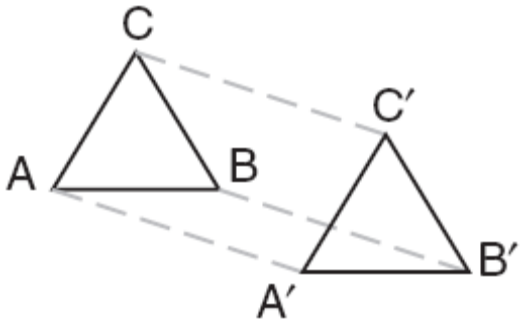

Which type of transformation was performed?

[A] dilation [B] translation

[C] reflection [D] rotation

NAME:_____

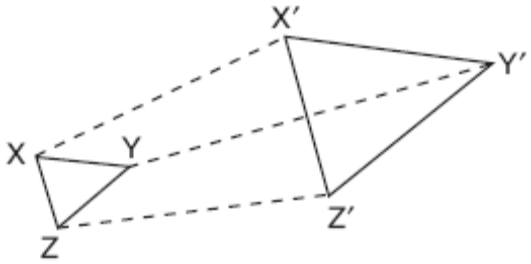
11. 080719a, P.I. G.G.56
In the accompanying diagram, $\Delta A'B'C'$ is the image of $\Delta ABC$ and $\Delta A'B'C' \cong \Delta ABC$.




Which type of transformation is shown in the diagram?

[A] rotation [B] translation
[C] line reflection [D] dilation

12. 060711a, P.I. G.G.60
The accompanying diagram shows the transformation of $\Delta XYZ$ to $\Delta X'Y'Z'$.




This transformation is an example of a

[A] translation [B] dilation
[C] line reflection [D] rotation

13. 080611a, P.I. G.G.58
Which transformation does *not* always result in an image that is congruent to the original figure?

[A] rotation [B] translation
[C] dilation [D] reflection

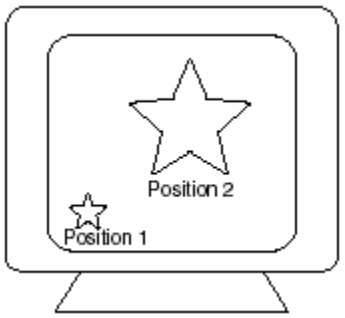
14. 060603a, P.I. G.G.58
One function of a movie projector is to enlarge the image on the film. This procedure is an example of a

[A] line reflection [B] dilation
[C] translation [D] line of symmetry

15. 010605b, P.I. G.G.54
Which transformation of the graph of $y = x^2$ would result in the graph of $y = x^2 + 2$?

[A] $r_{y=2}$ [B] $D_2$ [C] $T_{0,2}$ [D] $R_{0,90}$

16. 080506a, P.I. G.G.60
As shown in the accompanying diagram, the star in position 1 on a computer screen transforms to the star in position 2.



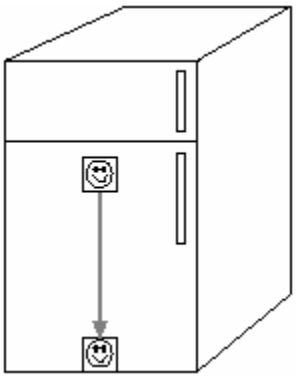

This transformation is best described as a

[A] dilation [B] rotation
[C] line reflection [D] translation

NAME:_____

17. 060508a, P.I. G.G.56

A picture held by a magnet to a refrigerator slides to the bottom of the refrigerator, as shown in the accompanying diagram.



This change of position is an example of a

[A] dilation [B] reflection

[C] rotation [D] translation

18. 010505a, P.I. G.G.45

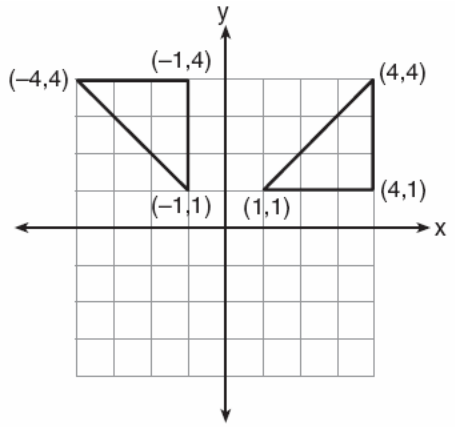
The perimeter of $\Delta A'B'C'$, the image of $\Delta ABC$, is twice as large as the perimeter of $\Delta ABC$. What type of transformation has taken place?

[A] rotation [B] dilation

[C] translation [D] reflection

19. 060410a, P.I. G.G.56

Which type of transformation is illustrated in the accompanying diagram?

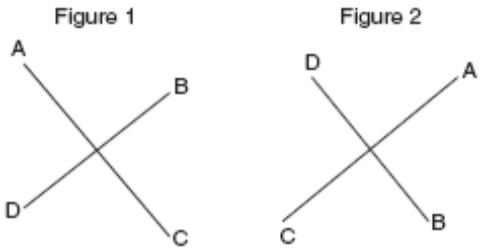



[A] translation [B] dilation

[C] reflection [D] rotation

20. 010305a, P.I. G.G.56

The accompanying diagram shows a transformation.




Which transformation performed on figure 1 resulted in figure 2?

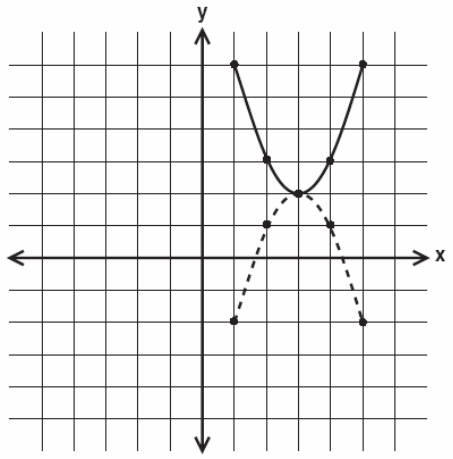
[A] dilation [B] reflection

[C] translation [D] rotation

NAME:_____

21. 080212a, P.I. G.G.56

In the accompanying diagram, which transformation changes the solid-line parabola to the dotted-line parabola?




[A] line reflection or rotation

[B] translation [C] line reflection, only

[D] rotation, only

22. 060217b, P.I. G.G.54

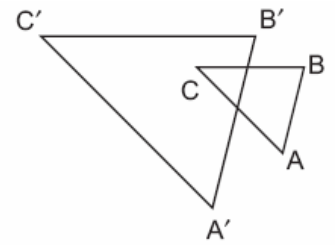
Point $P'$ is the image of point $P(-3,4)$ after a translation defined by $T_{(7,-1)}$. Which other transformation on $P$ would also produce $P'$?

[A] $R_{90°}$ [B] $r_{y-axis}$

[C] $R_{-90°}$ [D] $r_{y=-x}$

23. 060216a, P.I. G.G.60

In the accompanying diagram, $\Delta ABC$ is similar to but not congruent to $\Delta A'B'C'$. Which transformation is represented by $\Delta A'B'C'$?




[A] translation [B] dilation

[C] rotation [D] reflection

24. 060013a, P.I. G.G.58

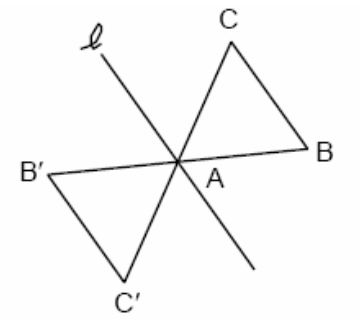
Which transformation does *not* always produce an image that is congruent to the original figure?

[A] rotation [B] reflection

[C] dilation [D] translation

25. 089903a, P.I. G.G.56

The transformation of $\Delta ABC$ to $\Delta AB'C'$ is shown in the accompanying diagram.




This transformation is an example of a

[A] line reflection in line $\ell$

[B] translation [C] dilation

[D] rotation about point $A$

[1] C

[2] B

[3] D

[4] B

[2] A correct transformation is stated and drawn, such as a translation, a dilation, a reflection through the origin, a rotation of 180° around the origin, or any description of a transformation.
[1] A correct transformation is stated, but the graph is missing or incorrect.
or [1] A correct graph is drawn, but a transformation is not stated or is stated incorrectly.
or [1] Appropriate work is shown, but one conceptual error is made.
[0] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an obviously incorrect procedure.

[5]

[6] C

[4] $\Delta ABC$ and $\Delta A'B'C'$ are graphed and labeled correctly, and the coordinates of $\Delta A'B'C'$ are stated as $A'(7,-9)$, $B'(2,-8)$, and $C'(3,-4)$, and point reflection or dilation with a factor of -1. (Note: rotation or rotation of 180° is an acceptable answer.)
[3] $\Delta ABC$ and $\Delta A'B'C'$ are graphed and labeled correctly, but the coordinates of $\Delta A'B'C'$ are not stated or are stated incorrectly but a correct transformation is stated.
or [3] $\Delta ABC$ and $\Delta A'B'C'$ are graphed and labeled correctly, and the coordinates of $\Delta A'B'C'$ are stated correctly, but the type of transformation is not stated or is stated incorrectly.
or [3] $\Delta ABC$ is not graphed, but $\Delta A'B'C'$ is graphed and labeled correctly, and its coordinates are stated correctly, and a correct transformation is stated.
or [3] $\Delta ABC$ is graphed incorrectly, but $\Delta A'B'C'$ is graphed and labeled appropriately, its coordinates are stated appropriately, and an appropriate type of transformation is stated.
[2] $\Delta ABC$ is graphed correctly, but one conceptual error is made, such as graphing an incorrect transformation, but the points are labeled appropriately, its coordinates are stated appropriately, and an appropriate type of transformation is stated.
or [2] $\Delta ABC$ is not graphed, but $\Delta A'B'C'$ is graphed and labeled correctly, and its coordinates are stated correctly, but the type of transformation is not stated or is stated incorrectly.
or [2] $\Delta ABC$ and $\Delta A'B'C'$ are graphed and labeled correctly, but the coordinates of and the type of transformation are not stated or are stated incorrectly
or [2] $\Delta ABC$ and $\Delta A'B'C'$ are not graphed, but the correct coordinates of $\Delta A'B'C'$ and a correct transformation are stated.
[1] Either $\Delta ABC$ or $\Delta A'B'C'$ is graphed correctly, but the coordinates of $\Delta A'B'C'$ and the type of transformation are not stated or are stated incorrectly.

[7]

or [1] $A'(7,-9)$, $B'(2,-8)$, and $C'(3,-4)$, but no further correct work is shown.
or [1] A correct transformation is stated, but no work is shown.
[0] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an obviously incorrect procedure.

[8] D

[9] C

[10] A

[11] B

[12] B

[13] C

[14] B

[15] C

[16] A

[17] D

[18] B

[19] D

[20] D

[21] A

[22] C

[23] B

[24] C

[25] D