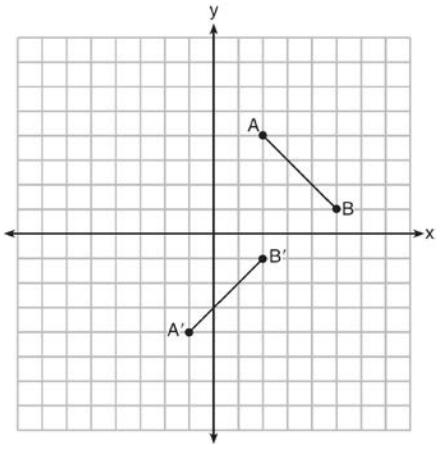
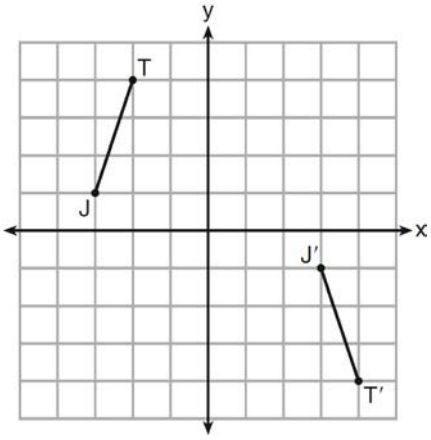
G.CO.A.2: Identifying Transformations 3

1 In the diagram below, $\overline{A'B'}$ is the image of $\overline{AB}$ under which single transformation?



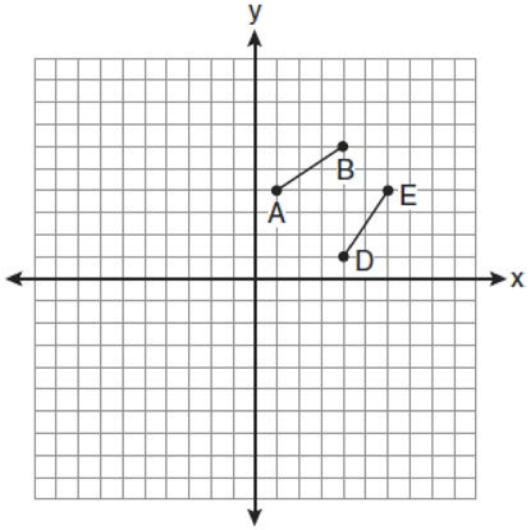
1) dilation
2) rotation
3) translation
4) glide reflection

2 The graph below shows $\overline{JT}$ and its image, $\overline{J'T'}$, after a transformation.



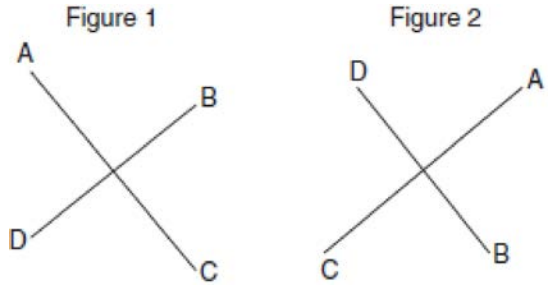
Which transformation would map $\overline{JT}$ onto $\overline{J'T'}$?
1) translation
2) glide reflection
3) rotation centered at the origin
4) reflection through the origin

3 The diagram below shows $\overline{AB}$ and $\overline{DE}$.



Which transformation will move $\overline{AB}$ onto $\overline{DE}$ such that point D is the image of point A and point E is the image of point B?
1) $T_{3,-3}$
2) $D_{\frac{1}{2}}$
3) $R_{90°}$
4) $r_{y=x}$

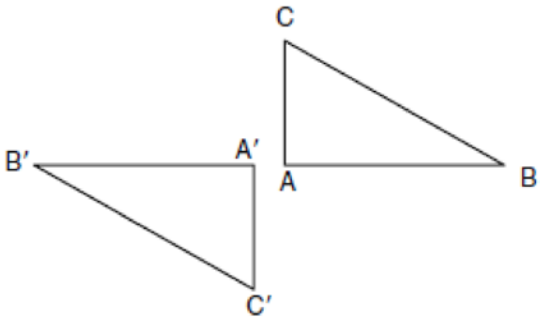
4 The accompanying diagram shows a transformation.



Which transformation performed on figure 1 resulted in figure 2?

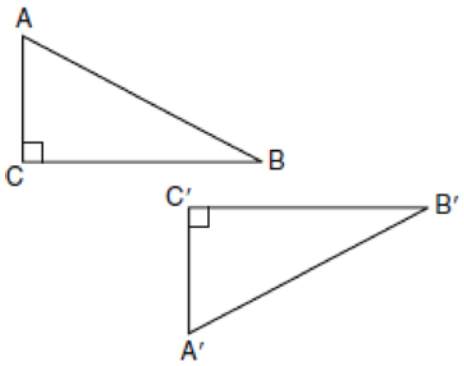
1) rotation
2) reflection
3) dilation
4) translation

5 In the diagram below, under which transformation will $\triangle A'B'C'$ be the image of $\triangle ABC$?



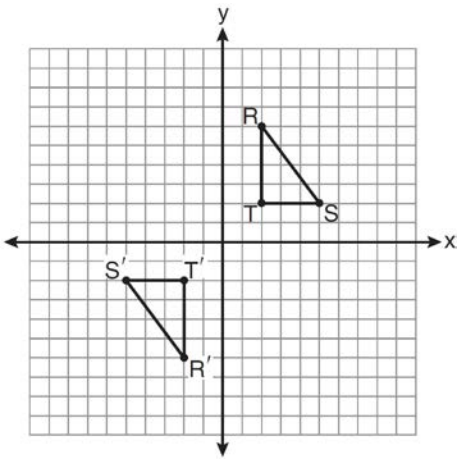
1) rotation
2) dilation
3) translation
4) glide reflection

6 In the diagram below, which transformation was used to map $\triangle ABC$ to $\triangle A'B'C'$?



1) dilation
2) rotation
3) reflection
4) glide reflection

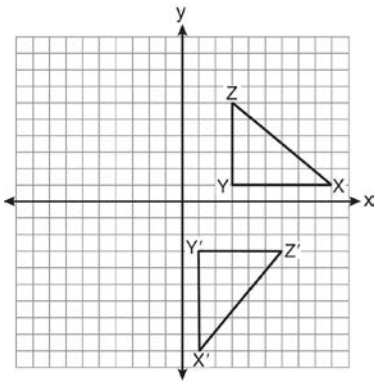
7 As shown on the graph below, $\triangle R'S'T'$ is the image of $\triangle RST$ under a single transformation.



Which transformation does this graph represent?

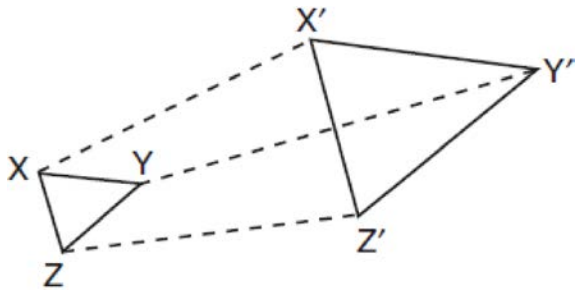
1) glide reflection
2) line reflection
3) rotation
4) translation

8 In the diagram below, under which transformation is $\triangle X'Y'Z'$ the image of $\triangle XYZ$?



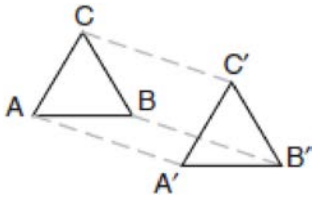
1) dilation
2) reflection
3) rotation
4) translation

9 The accompanying diagram shows the transformation of $\triangle XYZ$ to $\triangle X'Y'Z'$.



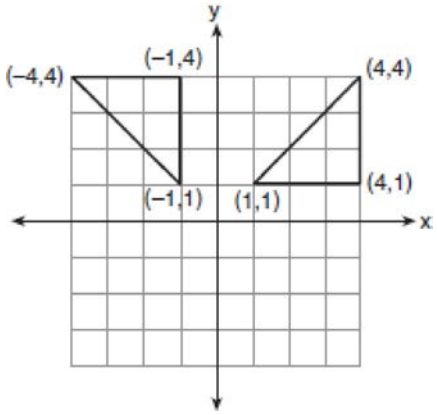
This transformation is an example of a
1) line reflection
2) rotation
3) translation
4) dilation

10 In the accompanying diagram, $\triangle A'B'C'$ is the image of $\triangle ABC$ and $\triangle A'B'C' \cong \triangle ABC$.



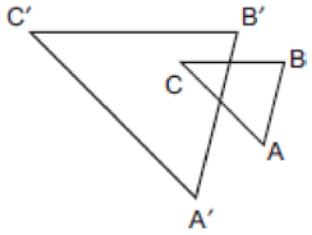
Which type of transformation is shown in the diagram?
1) line reflection
2) rotation
3) translation
4) dilation

11 Which type of transformation is illustrated in the accompanying diagram?



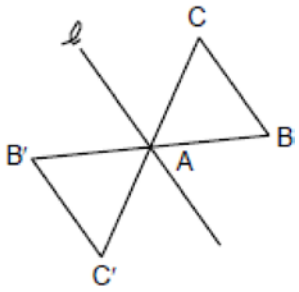
1) dilation
2) reflection
3) translation
4) rotation

12 In the accompanying diagram, $\triangle ABC$ is similar to but not congruent to $\triangle A'B'C'$.



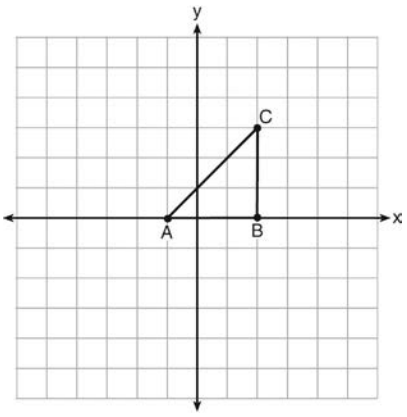
Which transformation is represented by $\triangle A'B'C'$?
1) rotation
2) translation
3) reflection
4) dilation

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



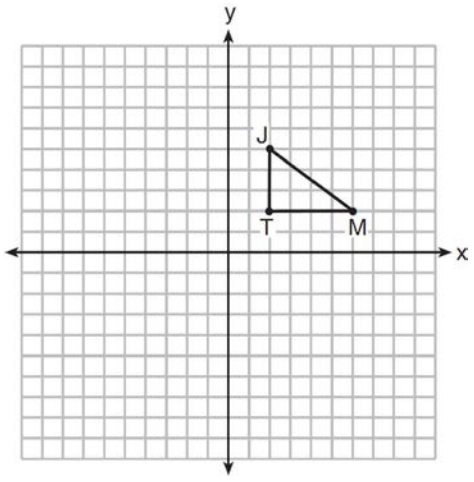
This transformation is an example of a
1) line reflection in line ℓ
2) rotation about point A
3) dilation
4) translation

14 Triangle ABC is graphed on the set of axes below.



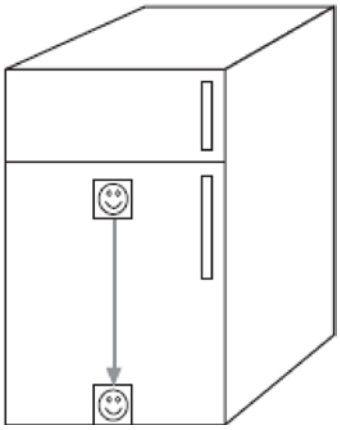
Which transformation produces an image that is similar to, but *not* congruent to, $\triangle ABC$?
1) $T_{2,3}$
2) D_2
3) $r_{y=x}$
4) R_{90}

15 Triangle JTM is shown on the graph below.



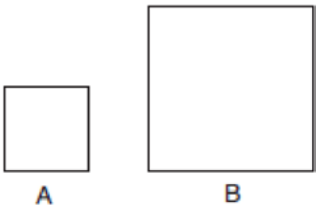
Which transformation would result in an image that is *not* congruent to $\triangle JTM$?
1) $r_{y=x}$
2) $R_{90°}$
3) $T_{0,-3}$
4) D_2

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



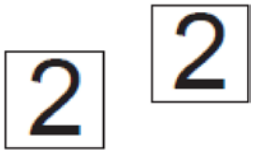
This change of position is an example of a
1) translation
2) dilation
3) rotation
4) reflection

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



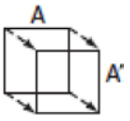
Which type of transformation was performed?
1) dilation
2) translation
3) rotation
4) reflection

18 Which transformation is illustrated by the accompanying diagram?



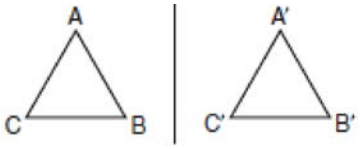
1) translation
2) reflection
3) rotation
4) dilation

19 Ms. Brewer's art class is drawing reflected images. She wants her students to draw images reflected in a line. Which diagram represents a correctly drawn image?

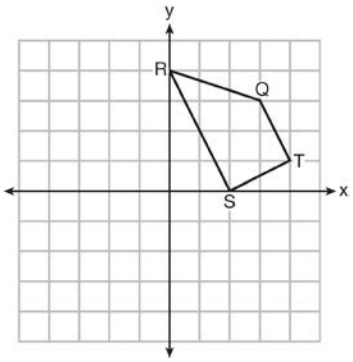
1) 

2) 

3) 

4) 

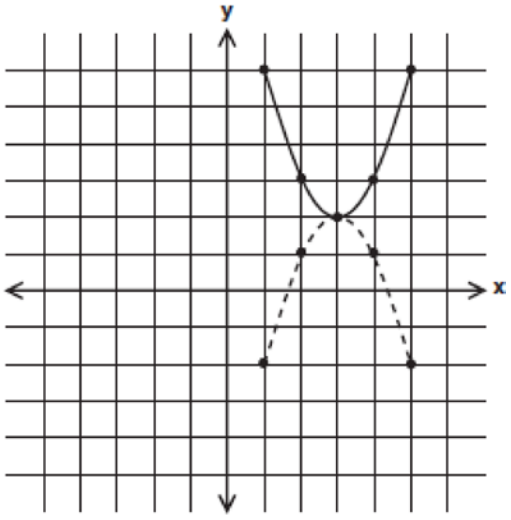
20 Trapezoid *QRST* is graphed on the set of axes below.



Under which transformation will there be *no* invariant points?

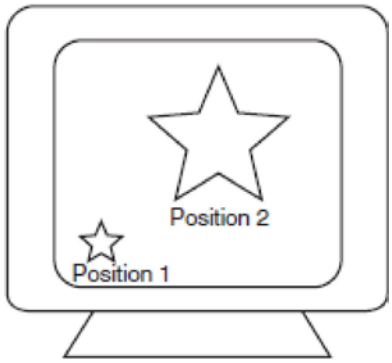
1) $r_{y=0}$
2) $r_{x=0}$
3) $r_{(0,0)}$
4) $r_{y=x}$

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



1) translation
2) line reflection, only
3) rotation, only
4) line reflection or rotation

22 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

1) line reflection
2) translation
3) rotation
4) dilation

23 Which image represents a line reflection?

1) P q
2) P d
3) P P
4) P P

G.CO.A.2: Identifying Transformations 3
Answer Section

1 ANS: 4
(2) rotation is also a correct response

REF: 011527ge

2	ANS: 2	REF: 061227ge
3	ANS: 4	REF: 061018ge
4	ANS: 1	REF: 010305a
5	ANS: 1	REF: 060903ge
6	ANS: 4	REF: 080915ge
7	ANS: 3	REF: 061122ge
8	ANS: 3	REF: 081405ge
9	ANS: 4	REF: 060711a
10	ANS: 3	REF: 080719a
11	ANS: 4	REF: 060410a
12	ANS: 4	REF: 060216a
13	ANS: 2	REF: 089903a
14	ANS: 2	REF: 061201ge
15	ANS: 4	REF: 081506ge
16	ANS: 1	REF: 060508a
17	ANS: 1	REF: 010804a
18	ANS: 1	REF: 060812a
19	ANS: 3	REF: 010602a
20	ANS: 3	REF: 011427ge
21	ANS: 4	REF: 080212a
22	ANS: 4	REF: 080506a
23	ANS: 1	REF: 010701a