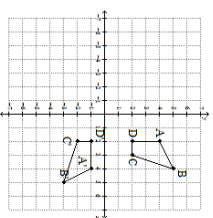


## Two objects/figures

Which of the following states:  
Line segment  $CD$  is congruent to line segment  $AB$ ?

- a.  $\overline{AD} \cong \overline{AB}$
- b.  $\overline{CD} \cong \overline{AB}$
- c.  $\overline{CD} \cong \overline{AB}$
- d.  $\overline{AD} \cong \overline{AB}$

Figure  $ABCD$  is transformed to figure  $A'B'C'D'$ , as shown:



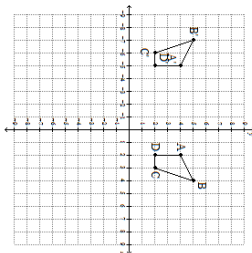
Which of the following sequences of transformations is used to obtain figure  $A'B'C'D'$  from figure  $ABCD$ ?

- a. Reflection about the  $y$ -axis followed by a translation to the right by 1 unit
- b. Counterclockwise rotation by  $270^\circ$  degrees about the origin followed by a translation to the up by 1 unit
- c. Clockwise rotation by  $90^\circ$  degrees about the origin followed by a translation to the right by 1 unit
- d. Reflection about the  $x$ -axis followed by a translation to the left by 1 unit

Which statement is true about the result of a rigid transformation involving a translation?

- a. The pre-image will be congruent to the image.
- b. Each one is unique; no general statement can be made about size.
- c. The pre-image will be larger than the image.
- d. The image will be larger than the pre-image.

Figure ABCD is transformed to figure  $A'B'C'D'$ , as shown:



Which of the following sequences of transformations is used to obtain figure  $A'B'C'D'$  from figure ABCD?

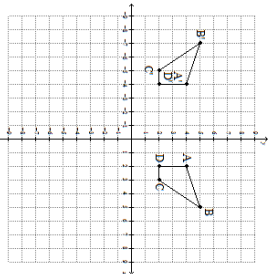
- Reflection about the  $y$ -axis followed by a translation to the left by 3 units
- Reflection about the  $x$ -axis followed by a translation to the up by 3 units
- Clockwise rotation by  $90^\circ$  degrees about the origin followed by a translation to the right by 3 units
- Counter-clockwise rotation by  $70^\circ$  degrees about the origin followed by a translation to the right by 3 units

Which of the following states:

Line segment  $AD$  is congruent to line segment  $CB$ ?

- $\overline{AD} \cong \overline{CB}$
- $\overline{AB} \cong \overline{CD}$
- $\overline{AD} \cong \overline{CB}$
- $\overline{AB} \cong \overline{CD}$

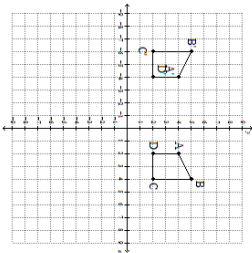
Figure ABCD is transformed to figure  $A'B'C'D'$ , as shown:



Which statement best describes the relationship between the two figures?

- Figure ABCD is bigger than figure  $A'B'C'D'$
- The measure of angle B is equal to the measure of angle C.
- Figure ABCD is congruent to figure  $A'B'C'D'$
- The measure of angle A is equal to the measure of angle B.

Figure ABCD is transformed to figure  $A'B'C'D'$ , as shown:



Which of the following sequences of transformations is used to obtain figure  $A'B'C'D'$  from figure ABCD?

- Counter-clockwise rotation by  $70^\circ$  degrees about the origin followed by a translation to the right by 2 units
- Clockwise rotation by  $90^\circ$  degrees about the origin followed by a translation to the right by 2 units
- Reflection about the  $y$ -axis followed by a translation to the left by 2 units
- Reflection about the  $x$ -axis followed by a translation to the up by 2 units