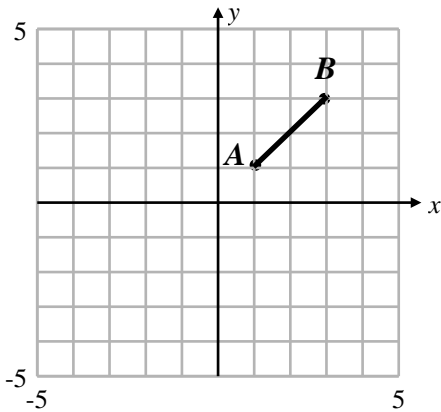




Transformations #1



Sketch the graph of line segment $A'B'$ for each of the following transformations listed below, using line segment AB . *Draw the original shape and the newly transformed shape on each grid.*

- A. **Reflect it over the x -axis**
- B. **Reflect it over the y -axis**
- C. **Translate it by $(-2, -3)$**
- D. **Rotate it 180° clockwise about the origin.**
- E. **Rotate it 90° counter clockwise about the origin.**

A.

A _____ B _____
A' _____ B' _____

B.

A _____ B _____
A' _____ B' _____

C.

A _____ B _____
A' _____ B' _____

D.

A _____ B _____
A' _____ B' _____

E.

A _____ B _____
A' _____ B' _____

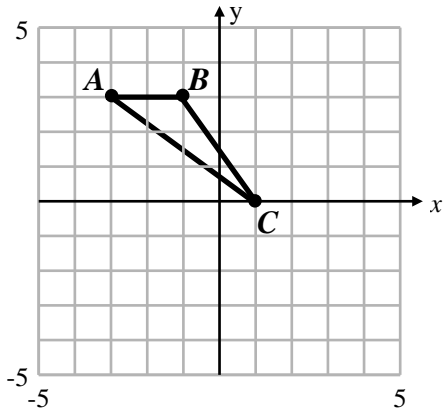
F.

a) After reflection, it appears that \overline{AB} **IS** or **IS NOT** congruent to $\overline{A'B'}$.

b) After translation, it appears that \overline{AB} **IS** or **IS NOT** congruent to $\overline{A'B'}$.

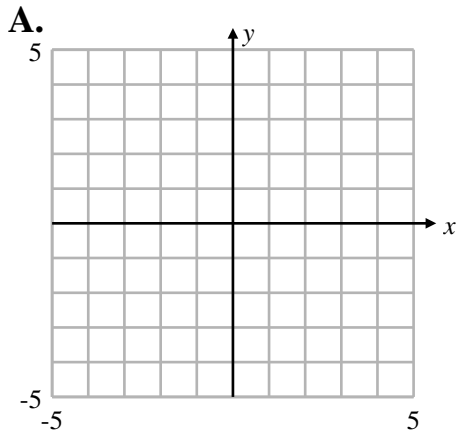
c) After rotation, it appears that \overline{AB} **IS** or **IS NOT** congruent to $\overline{A'B'}$.

Transformations #1 (page 2)



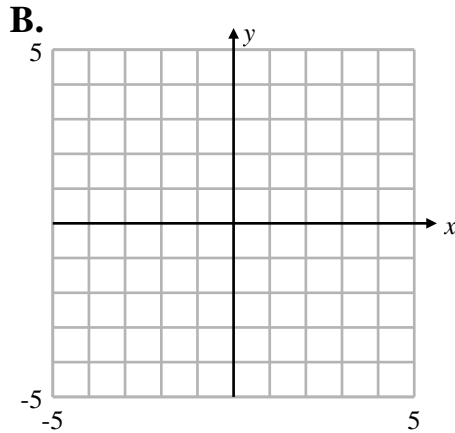
Sketch the graph of $\Delta A'B'C'$ for each of the following transformations listed below, using the ΔABC . Draw the original triangle and your newly transformed triangle on each grid.

- A. Reflect it over the x -axis
- B. Reflect it over the y -axis
- C. Translate it by $(2, -4)$
- D. Rotate it 180° counter clockwise about the origin.
- E. Rotate it 90° clockwise about the origin.



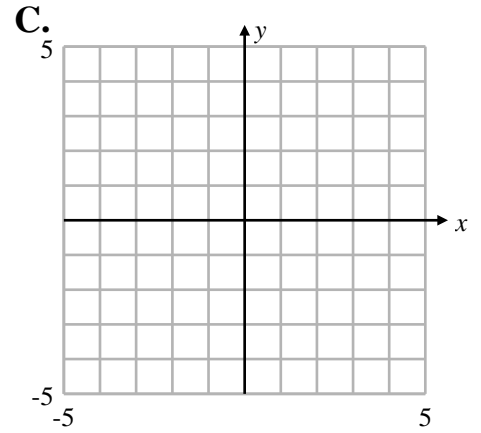
A _____ B _____ C _____

A' _____ B' _____ C' _____



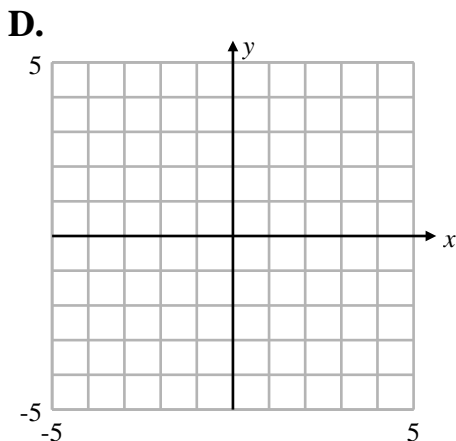
A _____ B _____ C _____

A' _____ B' _____ C' _____



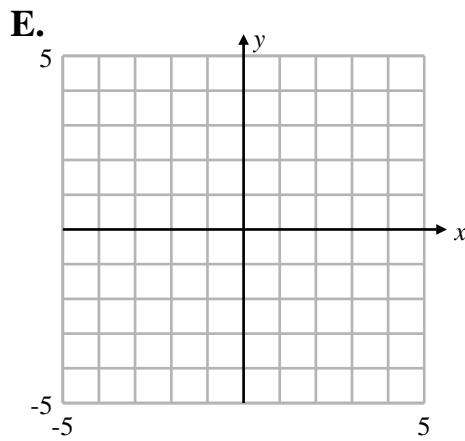
A _____ B _____ C _____

A' _____ B' _____ C' _____



A _____ B _____ C _____

A' _____ B' _____ C' _____



A _____ B _____ C _____

A' _____ B' _____ C' _____

F.

a) After reflection, it appears that ΔABC *IS* or *IS NOT* congruent to $\Delta A'B'C'$.

b) After translation, it appears that ΔABC *IS* or *IS NOT* congruent to $\Delta A'B'C'$.

c) After rotation, it appears that ΔABC *IS* or *IS NOT* congruent to $\Delta A'B'C'$.