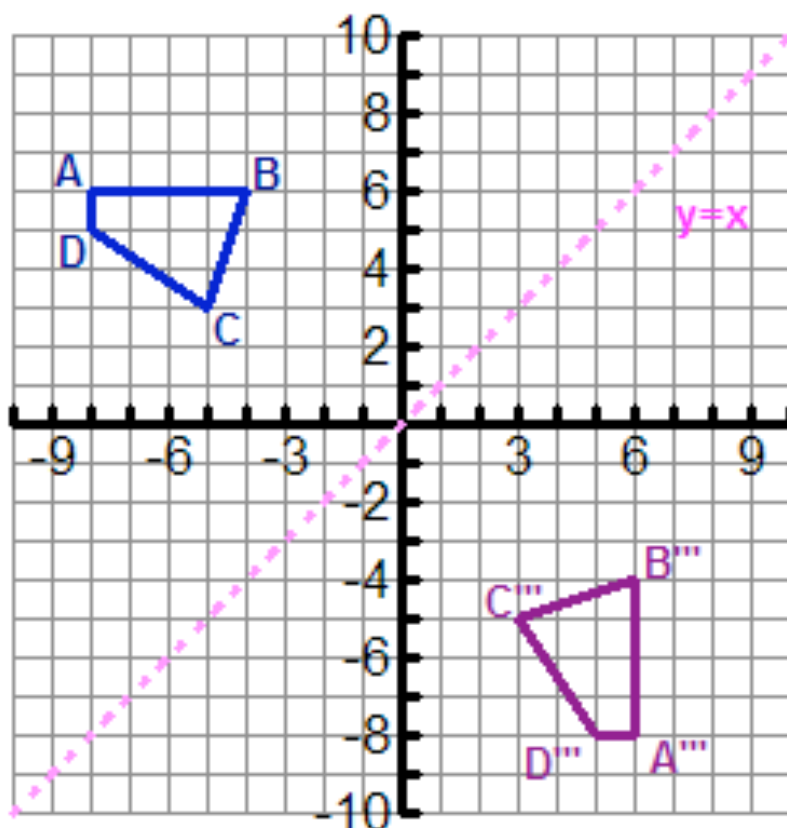


**TASK 2.8.4: REFLECTIONS ABOUT THE LINE  $y = x$** **Solutions:**

**IV:** Reflect the figure ABCD about the line  $y=x$  to form  $A'''B'''C'''D'''$ .

1. What is the slope of the line segment  $A'''B'''$ ? How does the slope of AB relate to the slope of  $A'''B'''$ ? **undefined; it is the reciprocal or inverse**
2. What is the slope of the line segment  $B'''C'''$ ? How does the slope of BC relate to the slope of  $B'''C'''$ ?  **$1/3$ ; it is the reciprocal or inverse**
3. What is the slope of the line segment  $C'''D'''$ ? How does the slope of CD relate to the slope of  $C'''D'''$ ?  **$-3/2$ ; it is the reciprocal or inverse**
4. What is the slope of the line segment  $A'''D'''$ ? How does the slope of AD relate to the slope of  $A'''D'''$ ?  **$0$ ; A slope of  $y/0$  is undefined or no slope; a slope of  $0/x$  is  $0$ .**



**TASK 2.8.4: REFLECTIONS ABOUT THE LINE  $y = x$** 

**IV:** Reflect the figure ABCD about the line  $y=x$  to form  $A''''B''''C''''D''''$ .

1. What is the slope of the line segment  $A''''B''''$ ? How does the slope of AB relate to the slope of  $A''''B''''$ ?
2. What is the slope of the line segment  $B''''C''''$ ? How does the slope of BC relate to the slope of  $B''''C''''$ ?
3. What is the slope of the line segment  $C''''D''''$ ? How does the slope of CD relate to the slope of  $C''''D''''$ ?
4. What is the slope of the line segment  $A''''D''''$ ? How does the slope of AD relate to the slope of  $A''''D''''$ ?

