Name _____ Date _____

In Exercises 7–12, graph $\triangle JKL$ and its image after a reflection in the given line. *(See Example 1.)*

7. $J(2, -4)$, $K(3, 7)$, $L(6, -1)$; x-axis

8. $J(5, 3)$, $K(1, -2)$, $L(-3, 4)$; y-axis

9. $J(2, -1)$, $K(4, -5)$, $L(3, 1)$; $x = -1$

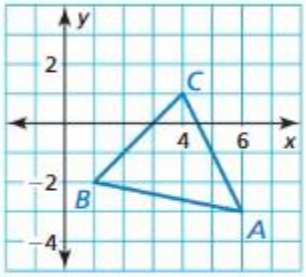
10. $J(1, -1)$, $K(3, 0)$, $L(0, -4)$; $x = 2$

11. $J(2, 4)$, $K(-4, -2)$, $L(-1, 0)$; $y = 1$

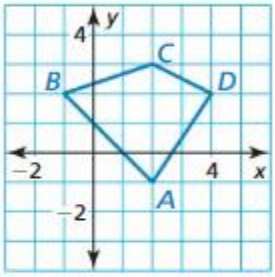
12. $J(3, -5)$, $K(4, -1)$, $L(0, -3)$; $y = -3$

In Exercises 13–16, graph the polygon and its image after a reflection in the given line. *(See Examples 2 and 3.)*

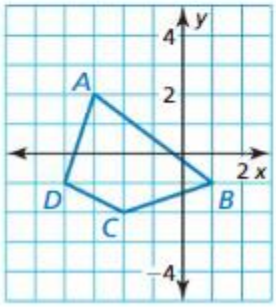
13. $y = x$



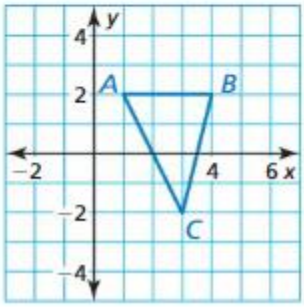
14. $y = x$



15. $y = -x$



16. $y = -x$



In Exercises 17–20, graph $\triangle RST$ with vertices $R(4, 1)$, $S(7, 3)$, and $T(6, 4)$ and its image after the glide reflection. *(See Example 4.)*

17. **Translation:** $(x, y) \rightarrow (x, y - 1)$
Reflection: in the y-axis

18. **Translation:** $(x, y) \rightarrow (x - 3, y)$
Reflection: in the line $y = -1$

19. **Translation:** $(x, y) \rightarrow (x, y + 4)$
Reflection: in the line $x = 3$

20. **Translation:** $(x, y) \rightarrow (x + 2, y + 2)$
Reflection: in the line $y = x$

21. $Reflect\ \Delta LPQ\ over\ the\ line\ y = 2x - 1, given\ L(3,1),\ P(4,-2), and\ Q(1,-3).$
Determine the ordered pairs for points L', P', and Q'.
Graph ΔLPQ, the line of reflection, and $\Delta L'P'Q'$, all on the same graph.