

12. Answers may vary. Sample: Reflect across the line $y = 1$, and then translate the image left 6 units. $(T_{\langle -6, 0 \rangle} \circ R_{y=1})(\triangle JKL) = \triangle J'K'L'$
13. $A'(-6, -6), B'(-3, 6), C'(7, 7)$
14. $A'(10, 4), B'(7, -8), C'(-3, -9)$
15. $A'(-12, 4), B'(-9, 16), C'(1, 17)$
16. $A'(1, 22), B'(-2, 10), C'(-12, 9)$
17. $A'(13, 0), B'(10, -12), C'(0, -13)$
18. Answers may vary. Sample: $(T_{\langle 0, 3 \rangle} \circ R_r)(\triangle DEF) = \triangle D'E'F'$ where r is the line $x = 1$.
19. Answers may vary. Sample: $(T_{\langle 0, 2 \rangle} \circ R_t)(\triangle DEF) = \triangle D'E'F'$ where t is the line $y = 8$.
20. Answers may vary. Sample: $(T_{\langle -6, 0 \rangle} \circ R_t)(\triangle DEF) = \triangle D'E'F'$ where t is the line $y = -2$.
21. $(T_{\langle -6, 0 \rangle} \circ R_{x\text{-axis}})(\triangle DEF) = \triangle D'E'F'$
23. $(T_{\langle 5, 0 \rangle} \circ R_t)(\square ABCD) = \square A'B'C'D'$, where t is the line $y = 7$.
25. I. (C)
- II. (B)
- III. (A)
- IV. (D)