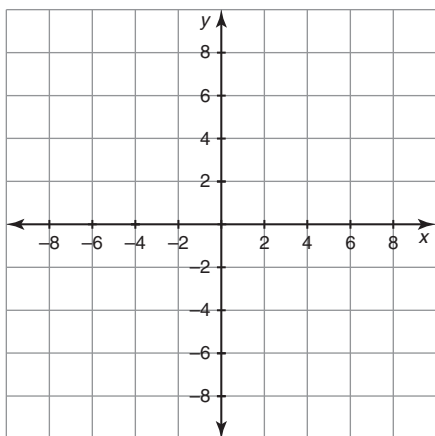


14.  $\triangle VWX$  has vertices  $V(-8, 9)$ ,  $W(-4, 6)$ , and  $X(2, 10)$ . What are the vertices of the image after the triangle is translated 6 units right and 15 units down?



**Use coordinate notation to determine the coordinates of the image.**

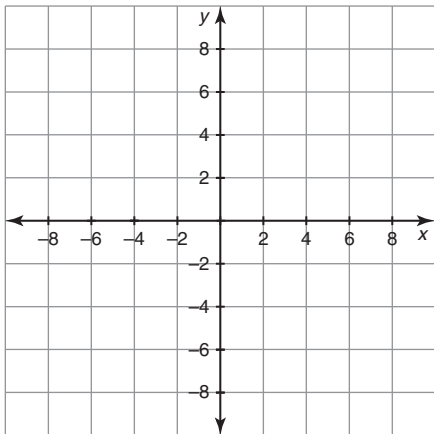
15. The parallelogram  $ABCD$  has vertices  $A(-6, 4)$ ,  $B(-2, 4)$ ,  $C(-7, 7)$ , and  $D(-3, 7)$ . What are the coordinates of the image after the parallelogram is translated 7 units right and 5 units down?

16. The parallelogram  $EFGH$  has vertices  $E(3, 2)$ ,  $F(8, 2)$ ,  $G(0, 5)$ , and  $H(5, 5)$ . What are the coordinates of the image after the parallelogram is translated 6 units left and 1 unit down?

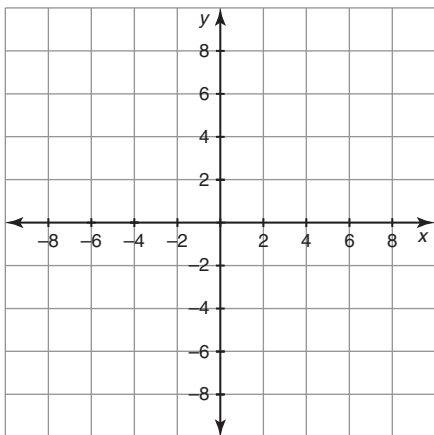
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17. The parallelogram  $IJKL$  has vertices  $I(-8, -7)$ ,  $J(-5, -7)$ ,  $K(-6, -2)$ , and  $L(-3, -2)$ . What are the coordinates of the image after the parallelogram is translated 3 units right and 8 units up?
18. The parallelogram  $MNOP$  has vertices  $M(5, -7)$ ,  $N(5, -4)$ ,  $O(9, -5)$ , and  $P(9, -2)$ . What are the coordinates of the image after the parallelogram is translated 12 units left and 2 units up?
19. The parallelogram  $QRST$  has vertices  $Q(2, 8)$ ,  $R(6, 8)$ ,  $S(5, 1)$ , and  $T(9, 1)$ . What are the coordinates of the image after the parallelogram is translated 4 units right?
20. The parallelogram  $UVWX$  has vertices  $U(-4, 5)$ ,  $V(-2, 5)$ ,  $W(-6, 2)$ , and  $X(-4, 2)$ . What are the coordinates of the image after the parallelogram is translated 7 units down?

**Given a transformation, identify another transformation that would yield the same result. Graph the image and preimage.**

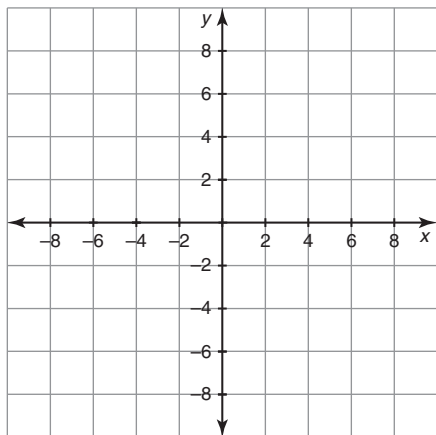
21.  $\triangle ABC$  with vertices  $A(-2, 2)$ ,  $B(0, -2)$ , and  $C(-1, -2)$  is reflected over the line  $x = 1$  and then over the line  $x = 5$ . What translation would yield the same image?



22.  $\triangle DEF$  with vertices  $D(6, 6)$ ,  $E(5, 1)$ , and  $F(9, 1)$  is reflected over the line  $x = 4$  and then over the line  $x = -2$ . What translation would yield the same image?



23.  $\triangle ABC$  with vertices  $A(3, 4)$ ,  $B(8, 5)$ , and  $C(7, 3)$  is reflected over the line  $y = 1$  and then over the line  $y = -5$ . What translation would yield the same image?



24.  $\triangle DEF$  with vertices  $D(-8, -6)$ ,  $E(-3, -6)$ ,  $F(-6, -4)$  is reflected over the line  $y = -3$  and then over the line  $y = 1$ . What translation would yield the same image?

