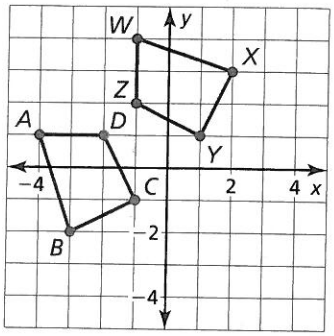
4. Graph the directed line segment ST with endpoints $S(-3, -2)$ and $T(4, 5)$. Then find the coordinates of point P along the directed line segment ST so that the ratio of SP to PT is 3 to 4. *(HSG-GPE.B.6)*

5. The graph shows quadrilateral $WXYZ$ and quadrilateral $ABCD$. *(HSG-CO.B.6)*



   a. Write a composition of transformations that maps quadrilateral $WXYZ$ to quadrilateral $ABCD$.

   b. Are the quadrilaterals congruent? Explain your reasoning.

6. Which equation represents the line passing through the point $(-6, 3)$ that is parallel to the line $y = -\frac{1}{3}x - 5$? *(HSG-GPE.B.5)*

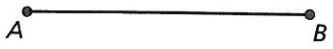
   (A) $y = 3x + 21$

   (B) $y = -\frac{1}{3}x - 5$

   (C) $y = 3x - 15$

   (D) $y = -\frac{1}{3}x + 1$

7. Which scale factor(s) would create a dilation of $\overline{AB}$ that is shorter than $\overline{AB}$? Select all that apply. *(HSG-SRT.A.1b)*



$\frac{1}{3}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$\frac{3}{2}$	2	3	$\frac{7}{2}$

8. List one possible set of coordinates of the vertices of quadrilateral $ABCD$ for each description. *(HSG-CO.A.3)*

   a. A reflection in the y-axis maps quadrilateral $ABCD$ onto itself.

   b. A reflection in the x-axis maps quadrilateral $ABCD$ onto itself.

   c. A rotation of 90° about the origin maps quadrilateral $ABCD$ onto itself.

   d. A rotation of 180° about the origin maps quadrilateral $ABCD$ onto itself.