

Transformation Part II Questions:

- 1) Given triangle TRY, with coordinates T(-2,3), R(3,6), and Y(1,-1).
 - a) Find the coordinates of triangle $T^1R^1Y^1$, the image of TRY after R_{90} .
 - b) Find the coordinates of triangle $T^{11}R^{11}Y^{11}$, the image of $T^1R^1Y^1$ after $r_{x\text{-axis}}$.
 - c) Find the coordinates of triangle $T^{111}R^{111}Y^{111}$, the image of $T^{11}R^{11}Y^{11}$ after $r_{y=x}$.

- 2) Given quadrilateral ABCD, with coordinates A(-2,2), B(-2,-2), C(-5,-2), and D(-5,2).
 - a) Find the coordinates of $A^1B^1C^1D^1$, the image of ABCD after $r_{y\text{-axis}}$.
 - b) Find the coordinates of $A^{11}B^{11}C^{11}D^{11}$, the image of ABCD after $T_{4,-2}$.
 - c) Find the coordinates of $A^{111}B^{111}C^{111}D^{111}$, the image of ABCD after D_2 .

- 3) Given quadrilateral WXYZ, with coordinates W(4,-3), X(6,-4), Y(5,-6), and Z(2,-5).
 - a) Find the coordinates of $W^1X^1Y^1Z^1$, the image of WXYZ after $r_{x\text{-axis}}$.
 - b) Find the coordinates of $W^{11}X^{11}Y^{11}Z^{11}$, the image of $W^1X^1Y^1Z^1$ after $D_{1.5}$.
 - c) Find the coordinates of $W^{111}X^{111}Y^{111}Z^{111}$, the image of WXYZ after R_{180} .

- 4) Given triangle JML, with coordinates J(0,-5), M(5,0), and L(-5,0).
 - a) Find the coordinates of $J^1M^1L^1$, the image of JML after $r_{x\text{-axis}}$.
 - b) Find the coordinates of $J^{11}M^{11}L^{11}$, the image of $J^1M^1L^1$ after R_{270} .
 - c) Find the coordinates of $J^{111}M^{111}L^{111}$, the image of $J^{11}M^{11}L^{11}$ after $r_{y=x}$.

- 5) Given quadrilateral RTSU, with coordinates R(-4,-4), S(-6,-2), T(-3,-1), and U(-1,-1).
 - a) Find the coordinates of $R^1S^1T^1U^1$, the image of RTSU after $r_{x\text{-axis}}$.
 - b) Find the coordinates of $R^{11}S^{11}T^{11}U^{11}$, the image of RTSU after $r_{y\text{-axis}}$.
 - c) Find the coordinates of $R^{111}S^{111}T^{111}U^{111}$, the image of $R^{11}S^{11}T^{11}U^{11}$ after $r_{x\text{-axis}}$.

- 6) Given triangle XYZ, with coordinates X(-3,6), Y(-3,2), and Z(3,2).
 - a) Find the coordinates of $X^1Y^1Z^1$, the image of XYZ after $T_{-3,1}$.
 - b) Find the coordinates of $X^{11}Y^{11}Z^{11}$, the image of XYZ after R_{270} .
 - c) Find the coordinates of $X^{111}Y^{111}Z^{111}$, the image of $X^{11}Y^{11}Z^{11}$ after $r_{y=x}$.

- 7) Given quadrilateral GEOM, with coordinates G(-4,2), E(-5,-6), O(4,-6), and M(4,2).
 - a) Find the coordinates of $G^1E^1O^1M^1$, the image of GEOM after $r_{x\text{-axis}}$.
 - b) Find the coordinates of $G^{11}E^{11}O^{11}M^{11}$, the image of $G^1E^1O^1M^1$ after $r_{y\text{-axis}}$.
 - c) Find the coordinates of $G^{111}E^{111}O^{111}M^{111}$, the image of $G^{11}E^{11}O^{11}M^{11}$ after $r_{y=x}$.

- 8) Given triangle ACE, with coordinates A(-6,6), C(-4,2), and E(5,5).
 - a) Find the coordinates of $A^1C^1E^1$, the image of ACE after D_2 .
 - b) Find the coordinates of $A^{11}C^{11}E^{11}$, the image of ACE after $T_{-2,-3}$.
 - c) Find the coordinates of $A^{111}C^{111}E^{111}$, the image of ACE after R_{270} .