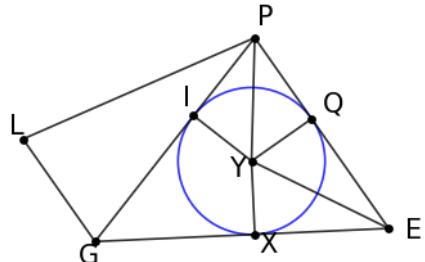


Synthesis Diagram

Image:



Logic Forms:

"Points": ["P", "E", "G", "L", "X", "Q", "I", "Y"],

"Lines": ["PE", "EG", "GL", "LP", "GP", "YX",
"YQ", "YI", "YP", "YE"],

"Shapes": ["Circle(Y)", "Trapezoid(P, E, G, L)"],

"Properties": [

 "Trapezoid(P, E, G, L) with Parallel(Line(P, E),
Line(L, G))"

],

"Relations": [

 "PointLiesOnCircle(I, Circle(Y, radius_0_0))",
 "PointLiesOnCircle(Q, Circle(Y, radius_0_0))",
 "PointLiesOnCircle(X, Circle(Y, radius_0_0))",
 "Incircle(Circle(Y, radius_0_0), Triangle(P, G, E))"

],

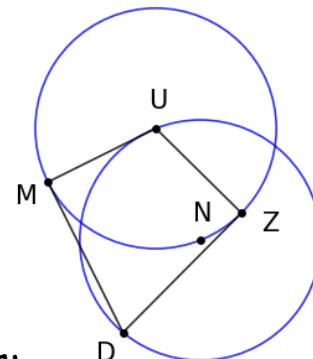
"Positions": {

 "P": (0.574, 0.344), "E": (0.777, 0.635),
 "G": (0.330, 0.654), "L": (0.221, 0.498),
 "X": (0.574, 0.643), "Q": (0.660, 0.467),
 "I": (0.480, 0.463), "Y": (0.568, 0.531)

}

Synthesis Diagram

Image:



Logic Forms:

"Points": ["U", "N", "D", "M", "Z"],

"Lines": ["DM", "DZ", "UM", "UZ"],

"Shapes": ["Circle(N)", "Circle(U)"],

"Relations": [

 "PointLiesOnCircle(U, Circle(N, radius_0_0))",
 "PointLiesOnCircle(D, Circle(N, radius_0_0))",
 "PointLiesOnCircle(N, Circle(U, radius_1_0))",
 "PointLiesOnCircle(Z, Circle(U, radius_1_0))",
 "PointLiesOnCircle(M, Circle(U, radius_1_0))",
 "Tangent(Line(D, M), Circle(U, radius_1_0))",
 "Tangent(Line(D, Z), Circle(U, radius_1_0))"

],

"Positions": {

 "U": (0.465, 0.410),
 "N": (0.533, 0.588),
 "D": (0.412, 0.732),
 "M": (0.295, 0.496),
 "Z": (0.600, 0.545)

}