The smallest integer right triangle is a 9, 12, 15 right triangle whose Perimeter = 9+12+15 = 36=>9, and whose Area = 1/2 (9 x 12) = 54=>9.

We note that AX = AZ, and BX = BY, and CZ = CY so that we have three unknowns.

Since AX + XB = 15, and BY + YC = 12, and AZ + ZC = 9, we have three equations with three unknowns.

Solving we get that AX = AZ = 6, BX = BY = 9, and CZ = CY = 3.

A) AX = 6, XB = 9, BY = 9, YC = 3, AZ = 6, and ZC = 3.

B) The length of the side ZC = 3, is the radius of the inscribed circle. The circle area A = 9\pi.

C) Each of the four triangles has the same height, 3 which is the radius of the circle. Triangles AZO and AXO are congruent and have areas of 9 each. Triangles BOX and BOY are congruent and have areas of 13.5=>9 each. Since the area of the square is also 9, the total area of the four interior triangles plus the square is 54=>9.

D) Angle OBX equals \arctan 1/3 = 18 degrees (note that 18=>9) and angle OAZ equals \arctan 1/2 = 27 degrees (note that 27=>9)