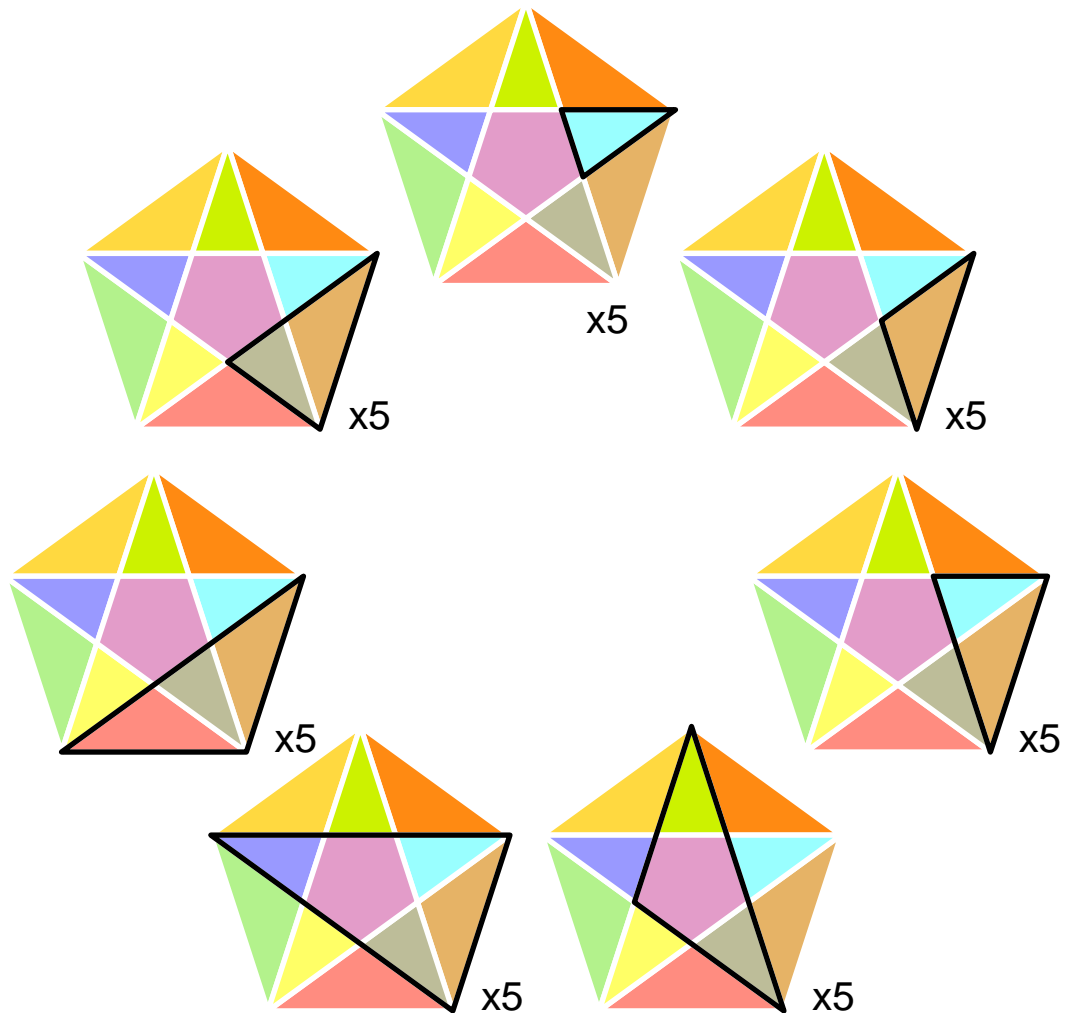


Draw the figure shown in the illustration; it's a pentagon with each its vertex connected with every other. The question is how many different triangles are hidden in this figure?



There are seven groups of triangles shown in the diagrams above. Each group consists of exactly five triangles with every triangle rotated 72 degrees around the center of the pentagon; one triangle from every group is highlighted in the respective diagram. So the total number of the triangles in the pentagon is $7 \times 5 = 35$.