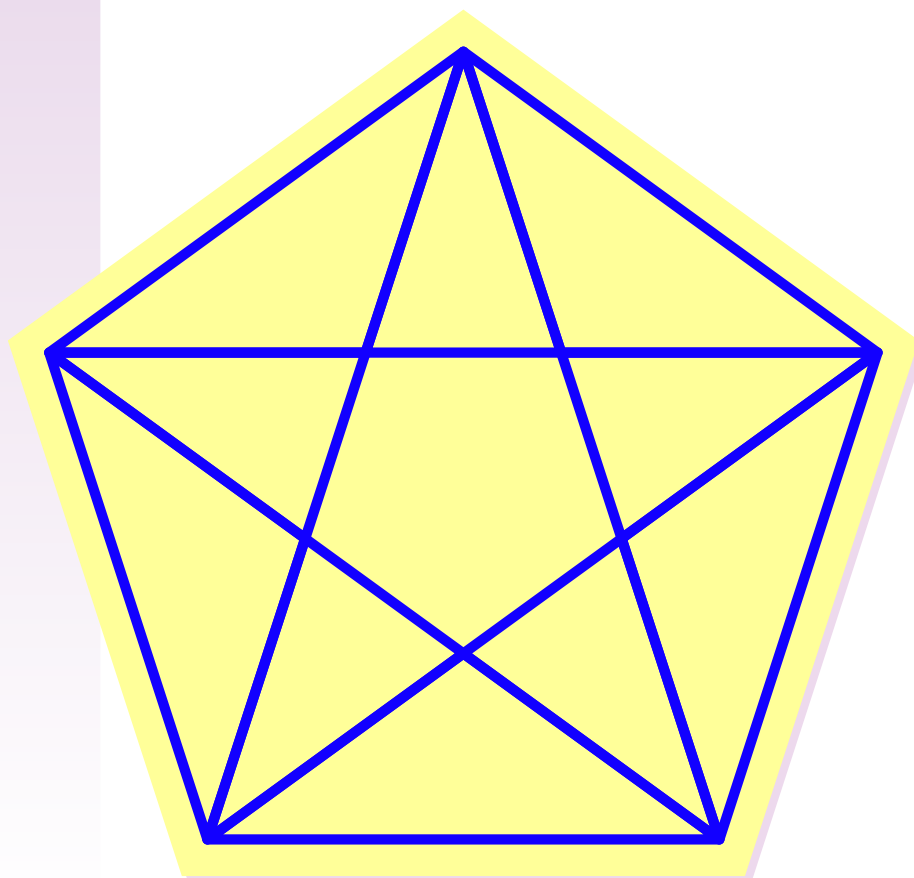


Treasure of Classic
and Modern Puzzles

Visual Puzzles



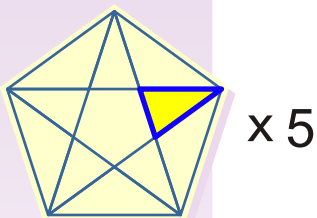
Counting the Triangles

by Henry E. Dudeney

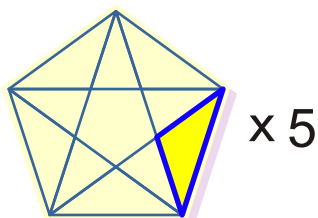
The question is how many different triangles are hidden in this figure?

Treasure of Classic
and Modern Puzzles

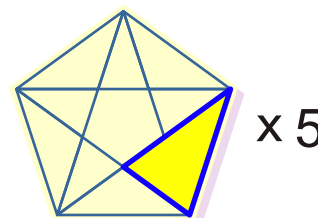
Visual Puzzles



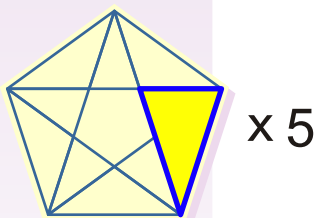
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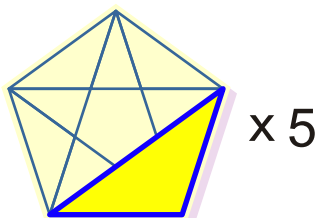
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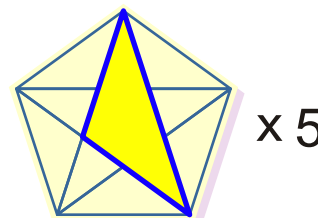
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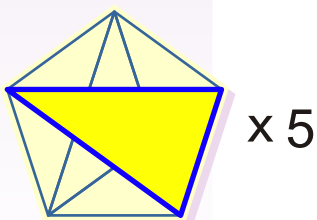
x 5



x 5



x 5



x 5

Counting the Triangles (solution)

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 $7 \times 5 = 35$.