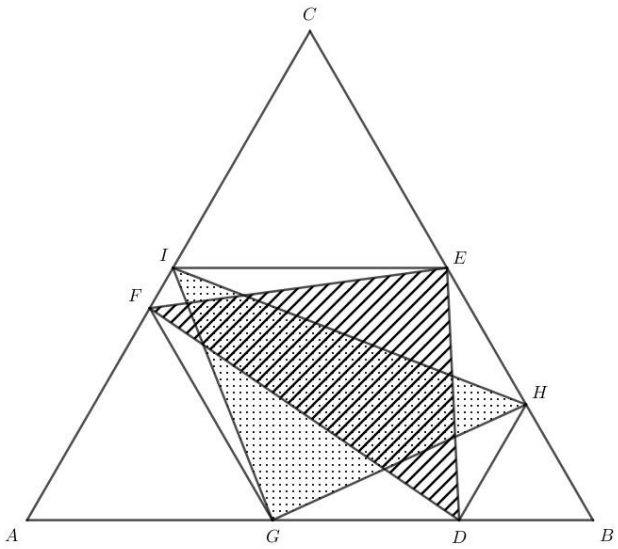
School:
Name of Student:
Sets: triangle
Further tools: paper, pencil, ruler, calculator
Date:

STUDENT
PUSE Task Number
C
141

Description of the task:

In the previous exercises we have seen that when the lengths of the sides of triangles AGF, BHD, and CIE are one half, one quarter, and one eighth of the side of triangle ABC, the areas of triangles EDF and GHI are the same (both $\frac{11}{32}$).
Is this statement true if the ratios of the sides of the triangles are not in the progression 1: 2: 4: 8?
So, the new task is: An equilateral triangle ABC is given in which FG, DH, EI are secant segments parallel to their respective opposite sides. Is it true that $T_{GHI} = T_{DEF}$?



Solution(s) of the task:

Remarks / Self-evaluation: