Today's Question Geometry Research Honors

Points D, E, and F are chosen respectively on sides \overline{AB} , \overline{BC} , and \overline{CA} of ΔABC . If AD:DB=BE:EC=CF:FA=1:3 and the ratio of the area of ΔDEF to the area of ΔABC is expressed as p/q in simplest form, compute p+q.