Problem of the Week

Problem C

Overlapping Shapes 1

Omar draws square $ABCD$ with side length 4 cm. Jaime then draws $\triangle AED$ on top of square $ABCD$ so that

- sides AE and DE meet BC at F and G, respectively,
- FG is 3 cm, and
- the area of $\triangle AED$ is twice the area of square $ABCD$.

Determine the area of $\triangle FEG$.