Problem of the Week

Problem D

Dividing a Square

In the diagram below, the large square $ABCD$ is divided into three regions, a smaller square $BFGH$ and two rectangles $AHGE$ and $CDEF$. The area of square $BFGH$ is $36 \text{ cm}^2$.

We are also given that:

Area of $BFGH$ – Area of $CDEF$ = Area of $CDEF$ – Area of $AHGE$

Determine the areas of rectangle $CDEF$ and rectangle $AHGE$. 

![Diagram of a square divided into smaller regions](image-url)