Problem of the Day

Part One

Two rectangles, $ABCD$ and $WXYZ$, are shown below. The measure of each side of $WXYZ$ is 5 times the measure of each corresponding side of $ABCD$.

Which statement is true of the areas of these two rectangles?

A. The area of $WXYZ$ is 5 times the area of $ABCD$.
B. The area of $WXYZ$ is 10 times the area of $ABCD$.
C. The area of $WXYZ$ is 20 times the area of $ABCD$.
D. The area of $WXYZ$ is 25 times the area of $ABCD$.

Describe your method.
What is the proportional of the area of triangle GHI to triangle ACE?

What is your method?

How does the problem change if we were to repeat the process of inscribing another similar triangle into GHI?