Problem of the Week Problem C A Bigger Triangle

Naveen drew a right-angled triangle, $\triangle ABC$, with an area of 14 cm². His brother Anand drew a bigger right-angled triangle, $\triangle DEF$, with side lengths four times the lengths of the sides in $\triangle ABC$. In particular, $DE = 4 \times AB$, $EF = 4 \times BC$, and $DF = 4 \times AC$.



Calculate the area of $\triangle DEF$.