Problem of the Week
Problem E
A Dividing Point

A square has vertices at $A(0,0)$, $B(-9,12)$, $C(3,21)$, and $D(12,9)$.

The line ℓ passes through A and intersects CD at point $T(r,s)$, splitting the square so that the area of square $ABCD$ is three times the area of $\triangle ATD$.

Determine the equation of line ℓ.