Clotting time calculation

The peak of the first derivative ($D_x$, $D_y$) locates the point of maximum speed of the reaction. The value ($D_y$) of the first derivative in $D_x$ correspond to the slope of the tangent line at the point ($D_x$, $A_D$)

The equation of the tangent line and passing through ($D_x$, $A_D$) follows:

$$\begin{align*}
y &= mx + b \\
m &= D_y \\
b &= A_D - D_y D_x \\
y &= D_y x + A_D - D_y D_x
\end{align*}$$

The coordinate (Ct) of the intersection point is:

$$\begin{align*}
y &= D_y x + A_D - D_y D_x \\
y &= A_i \\
x = Ct &= \frac{A_i - A_D + D_y D_x}{D_y}
\end{align*}$$