

For the side of the triangle from A to B , use $(x_1, y_1) = (1, 1)$ and $(x_2, y_2) = (3, 3)$. Hence, the equations are

$$\begin{aligned}x &= x_1 + (x_2 - x_1)t = 1 + (3 - 1)t = 1 + 2t, \\y &= y_1 + (y_2 - y_1)t = 1 + (3 - 1)t = 1 + 2t.\end{aligned}$$

Graphing $x = 1 + 2t$ and $y = 1 + 2t$ with $0 \leq t \leq 1$ gives us the side of the triangle from A to B . Similarly, for the side BC we use $x = 3 - 2t$ and $y = 3 + 3t$, and for the side AC we use $x = 1$ and $y = 1 + 5t$.

