1 | **1.**

1.1 | **a)**

No function possible. It's a function of t but not one of x.

1.2 | **b)**

Done on Geogebra

1.3 | **c)**

I'm too lazy to come up with an actual solution, but the steps is as follows: For the start and end point, we just plug in values for t. We get $(25, 125 - 5c)$ for the starting point, and $(49, 343 - 7c)$ As for the length, we use a modified arc length formula. We take the integral of $\sqrt{\left(\left(\frac{d}{dt}[x(t)]\right)^2 + \left(\frac{d}{dt}[y(t)]\right)^2\right)}$ from $t = 5$ to $t = 7$.