Provide a clear and organized presentation.

1. Remove the parameter from the following set of parametric equations:

$$
\begin{aligned}
& x=2 \sin t \\
& y=6 \sin 2 t
\end{aligned}
$$

2. My cat Theta kicked a mouse off of my dining room table, which stands 3 feet tall. If the initial speed was $25 \mathrm{ft} / \mathrm{s}$ and the angle made with the horizontal was $60^{\circ}$, then haw far from the table did this mouse land?
