Exercise: Breaking news!!!@) This morning, a tiger was detected by surveillance cameras at the following locations: $\mathrm{N}^{\prime} 0^{\circ} 55^{\prime} 30^{\prime \prime}$ and W73 ${ }^{\circ} 03^{\prime}$; $N 40^{\circ} 51^{\prime} 40^{\prime \prime}$ and $W 73^{\circ} 12^{\prime}$; N40 ${ }^{\circ} 52^{\prime} 12^{\prime \prime}$ and $W 73^{\circ} 00^{\prime}$. Identify the towns that might have been at risk...


## How to do it: Let us start with $N 40^{\circ} 55^{\prime} 30^{\prime \prime}$ and $W 73^{\circ} 03^{\prime}$.

First, identify longitude scale (shown in red): 1 box is equal to $02^{\prime}$, increasing from right to left; we need $\mathrm{W} 73^{\circ} 03^{\prime}$ so we shift half a box to the left from $\mathrm{W} 73^{\circ} 02^{\prime}$; the resulting longitude line is shown in red dash.
Similarly, latitude scale (shown in yellow): 4 boxes equal to $40^{\circ} 57^{\prime}-40^{\circ} 54^{\prime} 36^{\prime \prime}=$ $=2^{\prime} 24^{\prime \prime}=2 \mathrm{~min} 24 \mathrm{sec}=144 \mathrm{sec}$, therefore 1 box is equal to $144 / 4=36 \mathrm{sec}$ or $36^{\prime \prime}$; now we need $N 40^{\circ} 55^{\prime} 30^{\prime \prime}=N 40^{\circ} 55^{\prime} 48^{\prime \prime}-18^{\prime \prime}$, and $18^{\prime \prime}$ is exactly half a box; the resulting latitude line is shown in yellow dash.
The intersection of the two lines gives us Port Jefferson Station!


