10.1 - Projections of a curve

Consider the curve given by $\vec{\mathbf{r}}(t) = t\hat{i} - \frac{\sqrt{3}}{2}t^2\hat{j} + \frac{1}{2}t^2\hat{k}$.

Sketch all three planar projections. Can you visualize the entire curve by looking at the projections? [Check yourself by using *Mathematica's* `ParametricPlot3D[....]`.]

Consider the curve described by $\vec{\mathbf{r}}(t) = \langle t\cos t, t\sin t, t\rangle$ Sketch all three planar projections. Can you visualize the entire curve by looking at the projections? [Check yourself by using `ParametricPlot3D[....]`.]