#4.1. Számítsuk ki a megadott görbék ívhosszát az adott intervallumon!

a) $\boldsymbol{r}(t) = (t)\,\hat{\boldsymbol{i}} + (\sqrt{6}t^2/2)\,\hat{\boldsymbol{j}} + (t^3)\,\hat{\boldsymbol{k}}, \quad t \in [0;2]$

b) $\boldsymbol{r}(t) = (t\cos t)\,\hat{\boldsymbol{i}} + (t\sin t)\,\hat{\boldsymbol{j}}, \quad t \in [0;1]$

c) $\boldsymbol{r}(t) = (e^t\cos t)\,\hat{\boldsymbol{i}} + (e^t\sin t)\,\hat{\boldsymbol{j}} + (e^t)\,\hat{\boldsymbol{k}}, \quad t \in [0;2\pi]$

d) $\boldsymbol{r}(t) = (t-\sin t)\,\hat{\boldsymbol{i}} + (1-\cos t)\,\hat{\boldsymbol{j}}, \quad t \in [0;2\pi]$