Determine the curvature of the following curves by two ways. Only one way may work!

- 1. $\overline{r}(t) = t^2 \overline{i} + \sin 2t \overline{j} + \cos 2t \overline{k}$
- 2. $\overline{r}(t) = t \cos t \overline{i} t \sin t \overline{j} + t^2 \overline{k}$