# EEE 225 - Engineering Mathematics I (Differential Equations) <br> Homework 1 

$19^{\text {th }}$ Sep, 2022

1. Find the derivative of

$$
\begin{equation*}
\frac{\cos 3 t}{\sqrt{1-(3 t)^{2}}} \tag{1}
\end{equation*}
$$

2. Determine

$$
\begin{equation*}
I(t)=\int_{0}^{t} x^{2} e^{-6 x} d x \tag{2}
\end{equation*}
$$

