Draw a volume element on each picture then determine the volume of the solid formed when rotating the region bounded by the curves:

1. \( f(x) = e^{x-1} \) and \( g(x) = x^2 \) about the \( x \)-axis. \( (0 \leq x \leq 1) \)

2. \( f(x) = \cos x \) and \( g(x) = \sin x \) about the \( x \)-axis. \( (0 \leq x \leq \pi/4) \)
3. \( f(x) = \cos x \) and \( g(x) = \sin x \) about the \( y \)-axis.

\[
\begin{align*}
\end{align*}
\]

4. \( f(x) = 2x^3 + x \) and \( g(x) = 2x + 1 \) about the \( y \)-axis.

\[
\begin{align*}
\end{align*}
\]

5. \( f(x) = x^3 - 3x^2 + 3x \) and \( g(x) = \frac{1}{8}x^4 \) about the \( y \)-axis.

\[
\begin{align*}
\end{align*}
\]