Area and The Fundamental Theorem of Calculus - Key

In problems 1-4, find the definite integral

1. $\frac{-10}{3}$	216
3. $9-\sqrt{3}$	4. $\frac{1}{3} \left[\frac{1}{e^6} - \frac{1}{e^{15}} \right]$ or $\frac{e^9 - 1}{3e^{15}}$