(1) Graph the curve $r = \sin 3\theta$.

(2) Find the area inside the curve $r = 1 + \sin \theta$ and outside the curve $r = \sin \theta$, where $\frac{\pi}{3} \leq \theta \leq \frac{\pi}{2}$.

(3) Find the slope of the curve $r = 5 - 4\sin \theta$ at $\theta = \pi$. 