3. Integral calculus: Integration techniques (integrals of sums, multiplying constants, and substitution) applied to: a. x^n b. $\sin nx$, $\cos nx$, $\sin^2 nx$, $\cos^2 nx$; c. e^{nx} d. functions of the form: $\frac{1}{x+a}$, $\frac{1}{a^2+x^2}$, $\frac{1}{\sqrt{(a^2-x^2}}$, $\sqrt{(a^2-x^2}$. Definite integrals with applications to areas and volumes of revolution (confined to cones and spheres).		Integration by parts and partial fractions excluded.