

MAT143 – Cálculo para Ciências Biológicas
Respostas da Lista de Exercícios 11

1. (a) $-x \cos x + \sin x + C$
(b) $x(\ln x - 1) + C$
(c) $\frac{1}{3}x^3(\ln x - \frac{1}{3}) + C$
(d) $\frac{x^2}{2}((\ln x)^2 - \ln x + \frac{1}{2}) + C$
(e) $x(\ln x)^2 - 2x(\ln x - 1) + C$
(f) 1
2. (a) $\frac{1}{4}$
(b) $\frac{9}{2}$
3. (a) $\frac{15\pi}{2}$
(b) $\frac{3}{10}$
(c) $\frac{2\pi\sqrt{2}}{3}$