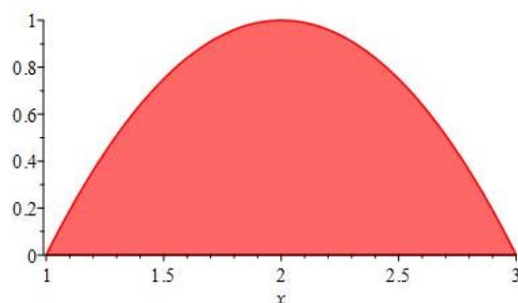
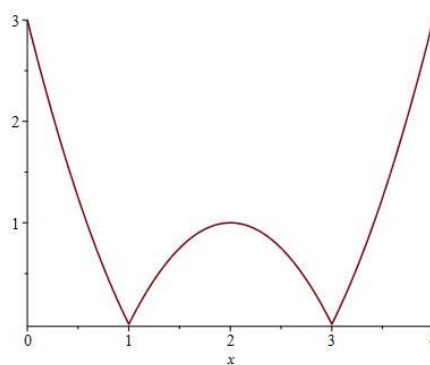
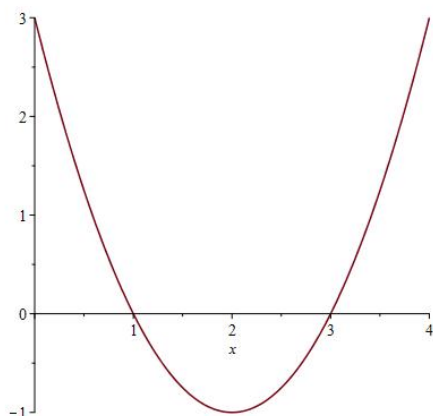

1.2 Consideramos la región plana Ω limitada por la curva $y = |x^2 - 4x + 3|$ y el eje de abscisas.

(a) Representa gráficamente Ω .

(b) Calcula el área de Ω .

SOLUCIÓN:

$$(a) \quad x^2 - 4x + 3 = -1 \Rightarrow x = \frac{4 \mp \sqrt{16 - 12}}{2} = \begin{cases} 1 \\ 3 \end{cases}$$



$$(b) \quad A = \int_1^3 |x^2 - 4x + 3| dx \Rightarrow A = \int_1^3 (-x^2 + 4x - 3) dx \Rightarrow A = \left[-\frac{x^3}{3} + 2x^2 - 3x \right]_1^3 \Rightarrow A = \frac{4}{3} \approx 1.33$$