APPROXIMATE METHODS OF INTEGRATION - TRAPEZOIDAL RULE

2 Evaluate $\int_0^1 \frac{dx}{x^2+1}$ using the trapezoidal rule with: **(a)** two subintervals **(b)** four subintervals.

APPROXIMATE METHODS OF INTEGRATION - TRAPEZOIDAL RULE

4 Evaluate $\int_1^2 x^3\,dx$ by: **(a)** direct integration **(b)** using the trapezoidal rule with two subintervals.

APPROXIMATE METHODS OF INTEGRATION - TRAPEZOIDAL RULE

13 Use the trapezoidal rule with two subintervals to estimate $\int_0^{\pi} \sqrt{\sin x}\, dx$ correct to 2 decimal places.

APPROXIMATE METHODS OF INTEGRATION - TRAPEZOIDAL RULE

17 Use the trapezoidal rule with four subintervals to evaluate $\int_0^{0.8} xe^{-x}\,dx$.