Practice worksheet | Integration techniques and applications

Definite integration

Name: _____ Date: _____

6 questions | 12 marks

1. Evaluate $\int_1^e 1/x\,dx$. [2 marks]

2. Evaluate $\int_0^\pi \sin x\,dx$. [2 marks]

3. Evaluate $\int_1^2 (2x+1)\,dx$. [2 marks]

4. If $\int_2^5 f(x)\,dx = 7$, find $\int_5^2 f(x)\,dx$. [2 marks]

5. Explain why ordinary endpoint subtraction is invalid for $\int_{-1}^{1} x^{-2}\,dx$. [2 marks]

6. Evaluate $\int_{-1}^{1} (x^2 + 2)\,dx$. [2 marks]