Practice worksheet | Integration techniques and applications

Further antiderivatives

Name: _____ Date: _____

6 questions | 12 marks

1. Find $\int x^{3/2}\,dx$ for x>0. [2 marks]

2. Find $\int (2e^{3x}+4)\,dx$. [2 marks]

3. Find $\int \cos(3x)\,dx$. [2 marks]

4. Find $\int (5/x - 2/x^3)\,dx$. [2 marks]

5. Given F'=6x and F(1)=5, find F. [2 marks]

6. Check whether $2\sqrt{x} + C$ is an antiderivative of $1/\sqrt{x}$ for x>0. [2 marks]