

## **11A Standard Integrals**

1. Find the value of  $\int_{-3}^{-2} \left(\frac{1}{x}\right) dx$

2. Find the following integral:

$$\int \left( 2\cos x + \frac{3}{x} - \sqrt{x} \right) dx$$

3. Find the following integral:

$$\int \left( \frac{\cos x}{\sin^2 x} - 2e^x \right) dx$$

4. Given that  $a$  is a positive constant and:

$$\int_a^{3a} \left( \frac{2x+1}{x} \right) dx = \ln 12$$

Find the exact value of  $a$ .