

TRAPEZIUM RULE

2

- 1 Use the trapezium rule with 3 intervals, each of width 1, to find an approximate value of

$$\int_2^5 x \ln x \, dx.$$

Give your answer correct to 3 significant figures.

[4]

2 (a) Find $\int (4x + 3)^{10} \, dx$.

[2]

- (b) Use the trapezium rule with two intervals to estimate the value of

$$\int_0^6 \ln(x^2 + 1) \, dx,$$

giving your answer correct to 3 significant figures.

[3]

- 3 Use the trapezium rule, with five strips each of width 1, to find an approximation to

$$\int_0^5 |2^x - 8| \, dx.$$

[5]