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The trapezium rule is to be used to find an approximation for

$$\int_{1.1}^{2.3} e^{-x} \sqrt{x+1} dx$$

The values required to obtain this approximation are shown in the table.

x	1.1	1.4	1.7	2	2.3
y	0.48238	0.38203	0.30018	0.23441	0.18213

Use the trapezium rule with 5 ordinates (4 strips) to find an approximation for

$$\int_{1.1}^{2.3} e^{-x} \sqrt{x+1} dx$$

Give your answer to four decimal places.

[3 marks]