

Advanced Higher Maths
SQA 2016 Paper
Question 13



Express $\frac{3x+32}{(x+4)(6-x)}$ in partial fractions and hence evaluate

$$\int_3^4 \frac{3x+32}{(x+4)(6-x)} dx.$$

Give your answer in the form $\ln\left(\frac{p}{q}\right)$.

9

Answer:

$$\int_3^4 \left(\frac{2}{x+4} + \frac{5}{6-x} \right) dx$$
$$= \ln \frac{486}{49}$$