

AQA – Integration – A2 Mathematics P3

1. [June/2021/Paper_7357/3/No.8](#)

Given that

$$\int_{\frac{\pi}{4}}^{\frac{\pi}{3}} x \cos x \, dx = a\pi + b$$

find the exact value of a and the exact value of b .

Fully justify your answer.

[6 marks]