

Higher Maths  
SQA 2016 Paper 2  
Question 11



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(a) Show that  $\sin 2x \tan x = 1 - \cos 2x$ , where  $\frac{\pi}{2} < x < \frac{3\pi}{2}$ . 4

(b) Given that  $f(x) = \sin 2x \tan x$ , find  $f'(x)$ . 2

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Answers:

(a) Proof. See marking instructions.

(b)  $f'(x) = 2 \sin 2x$

or

$$f'(x) = 4 \sin x \cos x$$