07	2a	(ii) Differentiate with respect to x: $(1 + \tan x)^{10}$.	2

Using the function of a function, or chain, rule:

$$\frac{d}{dx}[(1 + \tan x)^{10}] = 10(1 + \tan x)^9.\sec^2 x$$
$$= 10 \sec^2 x(1 + \tan x)^9$$

Board of Studies: Notes from the Marking Centre

(ii) Common errors included omitting the indices of 9 on $(1+ \tan x)$ or 2 on sec x, and incorrectly finding the derivative of $1+ \tan x$. Candidates are reminded that the derivative of $\tan x$ can be obtained using the standard integral sheet.

Source: http://www.boardofstudies.nsw.edu.au/hsc_exams/