

# A44 Hints

#25 draw the triangle representing  $\tan u = \frac{1}{2}$  in III Q  
Then  $\sin 2u = 2 \sin u \cos u$  etc.

#27 see  $\uparrow$  #25

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#31

reduce  
power

$$\frac{\sin^2 x}{\cos^2 x} = \frac{1}{2}(1 - \cos 2x)$$

multiply

reduce  
power  
(again)

#41  $\sin(105^\circ) = \sin\left(\frac{\pi}{2}\right)$  now use half angle