

Solomon Practice Paper

Pure Mathematics 5E

Time allowed: 90 minutes

Centre: www.CasperYC.club

Name:

Teacher:

Question	Points	Score
1	4	
2	6	
3	9	
4	9	
5	11	
6	11	
7	11	
8	14	
Total:	75	

How I can achieve better:

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3. Given that

$$\int_0^{\frac{2\pi}{3}} \frac{1}{5 + 4 \cos(x)} dx = a\pi, \quad a \in \mathbb{Q},$$

use the substitution $t = \tan\left(\frac{1}{2}x\right)$ to find the value of a .

[9]



