

Solomon Practice Paper

Pure Mathematics 3E

Time allowed: 90 minutes

Centre: www.CasperYC.club

Name:

Teacher:

Question	Points	Score
1	5	
2	6	
3	7	
4	9	
5	10	
6	11	
7	12	
8	15	
Total:	75	

How I can achieve better:

-
-
-

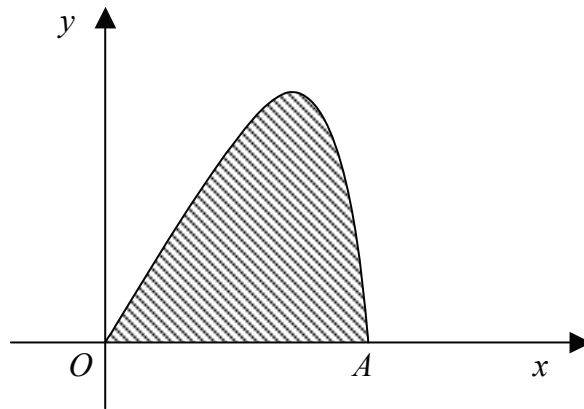


Last updated: December 24, 2025



6. Figure shows the curve with parametric equations

$$x = \cos(t), \quad \text{and} \quad y = 3 \sin(2t), \quad 0 \leq t \leq \frac{\pi}{2}.$$



The curve meets the x -axis at the origin, O , and at the point A with coordinates $(1, 0)$.

(a) Find the value of the parameter t at the points O and A . [3]

(b) Find the area of the shaded region enclosed by the curve and the x -axis. [8]

Total: 11



