

# Solomon Practice Paper

## Pure Mathematics 1E

Time allowed: 90 minutes

Centre: [www.CasperYC.club](http://www.CasperYC.club)

Name:

Teacher:

Question	Points	Score
1	5	
2	6	
3	7	
4	7	
5	9	
6	13	
7	13	
8	15	
Total:	75	

How I can achieve better:

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Last updated: December 24, 2025











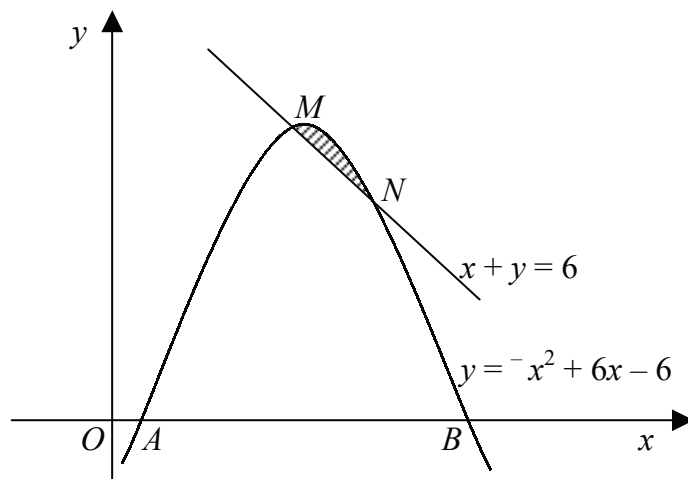








8. Figure shows part of the curve  $y = -x^2 + 6x - 6$  and the line  $x + y = 6$ .



The curve crosses the line at the points  $M$  and  $N$  and cuts the  $x$ -axis at the points  $A$  and  $B$ .

- (a) Find the  $x$ -coordinates of the points  $A$  and  $B$ , giving your answers correct to 2 decimal places. [3]
- (b) Find the coordinates of the points  $M$  and  $N$ . [5]
- (c) Calculate the area of the shaded region enclosed by the curve and the line  $MN$ . [7]

Total: 15

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