

# Solomon Practice Paper

## Pure Mathematics 6A

Time allowed: 90 minutes

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

Name:

Teacher:

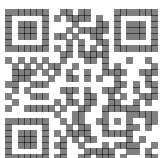
Question	Points	Score
1	6	
2	6	
3	7	
4	9	
5	11	
6	11	
7	11	
8	14	
Total:	75	

How I can achieve better:

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Last updated: May 5, 2023











5.

[11]

$$(1 + x^2) \frac{d^2y}{dx^2} + 4x \frac{dy}{dx} + 2y = 0$$

and

$$y = 1, \quad \frac{dy}{dx} = 1$$

at  $x = -1$ .

Find a series solution of the differential equation in ascending powers of  $(x + 1)$  up to and including the term in  $(x + 1)^4$ .

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