



**CHEMISTRY ONLINE**  
— TUITION —

Phone: +442081445350

[www.chemistryonlinetuition.com](http://www.chemistryonlinetuition.com)

Email: [asherrana@chemistryonlinetuition.com](mailto:asherrana@chemistryonlinetuition.com)

# PURE MATH

## ALGEBRA AND FUNCTION

Level & Board	EDEXCEL (A-LEVEL)
TOPIC:	GEOMETRIC SERIES
PAPER TYPE:	QUESTION PAPER - 2
TOTAL QUESTIONS	8
TOTAL MARKS	34

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**Questions**

**Q1.**

Determine the sum of the geometric series  $8 - 4 + 2 + \dots$  with  $a = 8$  and  $r = -0.5$ .

**(4)**

**(Total for question = 4 marks)**

**Q2.**

Find the sum (S) of the geometric series  $3 + 6 + 12 + \dots$  With  $a = 3$  and  $r = 2$

**(4)**

**(Total for question = 4 marks)**

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I am Sorry !!!!!

**Q3.**

Find the sum of the geometric series  $2 + 6 + 18 + \dots$  With  $a = 2$  and  $r = 3$

**(3)**

**(Total for question = 3 marks)**

**Q4.**

Calculate the sum of the geometric series  $4 - 2 + 1 - \frac{1}{2} + \dots$  With  $a = 4$   
and  $r = -\frac{1}{2}$

**(5)**

**(Total for question = 5 marks)**

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**Q5.**

Determine the sum of the geometric series  $7 - \frac{7}{3} + \frac{7}{9} - \frac{7}{27} + \dots$  With  $a = 7$  and  $r = -\frac{1}{3}$ .

**(5)**

**(Total for question = 5 marks)**

**Q6.**

Find the sum of the geometric series  $1 + \frac{2}{3} + \frac{4}{9} + \frac{8}{27} + \dots$  with  $a = 1$  and  $r = \frac{2}{3}$

**(4)**

**(Total for question = 4 marks)**

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**Q7.**

Calculate the sum of the geometric series  $-5, 10, -20, 40, \dots$ . With  $a = -5$  and  $r = -2$ .

**(5)**

**(Total for question = 5 marks)**

**Q8.**

Determine the sum of the geometric series  $6 + \frac{3}{2} + \frac{3}{4} + \frac{3}{8} + \dots$ . With  $a = 6$  and

$$r = \frac{1}{2}.$$

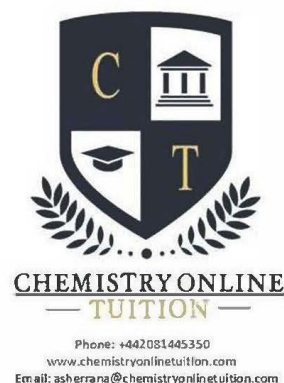
**(4)**

**(Total for question = 4 marks)**

I am Sorry !!!!!



**DR. ASHAR RANA**



- Founder & CEO of Chemistry Online Tuition Ltd.
- Tutoring students in UK and worldwide since 2008
- CIE & EDEXCEL Examiner since 2015
- Chemistry, Physics, and Math's Tutor

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## CONTACT INFORMATION FOR CHEMISTRY ONLINE TUITION

- UK Contact: 02081445350
  - International Phone/WhatsApp: 00442081445350
  - Website: [www.chemistryonlinetuition.com](http://www.chemistryonlinetuition.com)
  - Email: [asherrana@chemistryonlinetuition.com](mailto:asherrana@chemistryonlinetuition.com)
- Address: 210-Old Brompton Road, London SW5 OBS, UK