

Phone: +442081445350

www.chemistryonlinetuition.com

Email:asherrana@chemistryonlinetuition.com

PURE MATH

ALGEBRA AND FUNCTION

Level & Board	EDEXCEL (A-LEVEL)
TOPIC:	FUNCTIONS
PAPER TYPE:	QUESTION PAPER - 6
TOTAL QUESTIONS	8
TOTAL MARKS	38

ChemistryOnlineTuition Ltd reserves the right to take legal action against any individual/ company/organization involved in copyright abuse.

Questions

Q1.

The function f is defined by

$$v(x) = log_3(|x| + 2), x \in \mathbb{R},$$

(a) state the range of f

(4)

(Total for question = 4 marks)

Q2.

The function f is defined by

$$g(x) = \frac{1}{x-1}, \ x \in \mathbb{R} \ x \neq 1$$

(a) state the range of f

(2)

(b) Find an expression for $f^{-1}(x)$ and state its domain

(3)

(Total for question = 5 marks)

Q3.

The function f is defined by

$$f(x) = x^2 + 2x + 1, x \in \mathbb{R}, x \ge -1$$

(a) state the range of f

(1)

(b) Find an expression for $f^{-1}(x)$ and state its domain

(4)

(Total for question = 5 marks)

Q4.

The function f is defined by

$$g(x)=3x-4, x\in\mathbb{R}, x\geq 2$$

(a) state the range of f

(2)

(b) Find an expression for $f^{-1}(x)$ and state its domain

(4)

(Total for question = 6 marks)

Q5.

The function f is defined by

$$f(x) = 2^x - 1, x \in \mathbb{R}, x \ge -1$$

(a) state the range of f

(1)

(b) Find an expression for $f^{-1}(x)$ and state its domain

(4)

(Total for question = 5 marks)

Q6.

The function f is defined by

$$g(x) = x^2 + 3x + 5 - 4, x \in \mathbb{R}, x \ge 2$$

(a) state the range of f

(2)

(b) Find an expression for $f^{-1}(x)$ and state its domain

(4)

(Total for question = 6 marks)

Q7.

The function f is defined by

$$v(x) = log_3(|x| - 10), x \in \mathbb{R},$$

(a) state the range of f

(4)

(Total for question = 4 marks)

Q8.

The function f is defined by

$$r(x) = lne^x, \ x \in \mathbb{R} \ x \neq 1$$

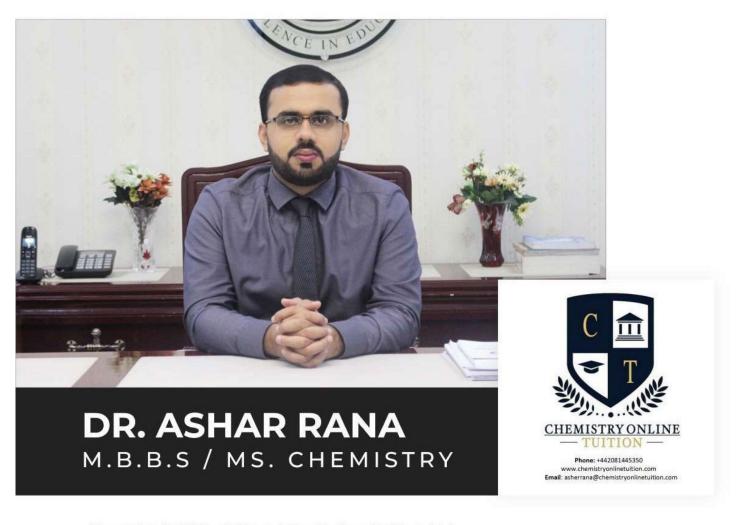
(a) state the range of f

(2)

(b) Find an expression for $f^{-1}(x)$ and state its domain

(3)

(Total for question = 5 marks)



- Founder & CEO of Chemistry Online Tuition Ltd.
- · Completed Medicine (M.B.B.S) in 2007
- Tutoring students in UK and worldwide since 2008
- · CIE & EDEXCEL Examiner since 2015
- Chemistry, Physics, Math's and Biology Tutor

CONTACT INFORMATION FOR CHEMISTRY ONLINE TUITION

- · UK Contact: 02081445350
- · International Phone/WhatsApp: 00442081445350
- · Website: www.chemistryonlinetuition.com
- Email: asherrana@chemistryonlinetuition.com
 - Address: 210-Old Brompton Road, London SW5 OBS, UK