



CHEMISTRY ONLINE
— **TUITION** —

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PURE MATH

ALGEBRA AND FUNCTION

Level & Board	EDEXCEL (A-LEVEL)
TOPIC:	BINOMIAL EXPENSION
PAPER TYPE:	QUESTION PAPER - 1
TOTAL QUESTIONS	8
TOTAL MARKS	39

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Questions**Q1.**

- (a) Use the binomial expansion, in ascending powers of x , to show that

$$\sqrt{4-x} = 2 - \frac{1}{4}x + kx^2 + \dots$$

where k is a rational constant to be found.

A student attempts to substitute $x = 1$ into both sides of this equation to find an approximate value for $\sqrt{3}$.

(4)

- (b) State, giving a reason, if the expansion is valid for this value of x .

(2)

(Total for question = 6 marks)

Q2.

Express the binomial expansion for $(3 - 2x)^{\frac{1}{2}}$

(4)

(Total for question = 4 marks)

Q3.

Expand the binomial expansion for $(1.03)^{\frac{1}{3}}$

(3)

(Total for question = 3 marks)

Q4.

Expand the binomial expansion for $(1 - 4x)^{\frac{2}{3}}$.

(5)

(Total for question = 5 marks)

I am Sorry !!!!!

Q5.

Expand the binomial expansion for $\sqrt[4]{17}$

(5)

(Total for question = 5 marks)

Q6.

Expand the binomial expansion for $(1 - 3x)^{\frac{4}{3}}$

(4)

(Total for question = 4 marks)

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Q7.

Expand the binomial expansion for $(3 + 2x)^{\frac{5}{2}}$

(5)

(Total for question = 5 marks)

Q8.

Expand the binomial expansion for $(1 - 5x)^{\frac{2}{3}}$

(4)

(Total for question = 4 marks)

I am Sorry !!!!!



DR. ASHAR RANA



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- CIE & EDEXCEL Examiner since 2015
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