

Indices

Difficulty: Easy

Question Paper 1

Level	AS & A Level
Subject	Maths - Pure
Exam Board	Edexcel
Topic	Algebraic Expressions
Sub-Topic	Indices
Difficulty	Easy
Booklet	Question Paper 1

Time allowed: 29 minutes

Score: /24

Percentage: /100

Grade Boundaries:

A*	A	B	C	D	E	U
>76%	61%	52%	42%	33%	23%	<23%

Question 1

(a) Write down the value of $16^{\frac{1}{2}}$. (1)

(b) Find the value of $16^{-\frac{3}{2}}$. (2)

(Total 3 marks)

Question 2

(a) Write down the value of $8^{\frac{1}{3}}$. (1)

(b) Find the value of $8^{-\frac{2}{3}}$. (2)

(Total 3 marks)

Question 3

(a) Find the value of $8^{\frac{4}{3}}$. (2)

(b) Simplify $\frac{15x^{\frac{4}{3}}}{3x}$. (2)

(Total 4 marks)

Question 4

(a) Write down the value of $125^{\frac{1}{3}}$. (1)

(b) Find the value of $125^{-\frac{2}{3}}$. (2)

(Total 3 marks)

Question 5

(a) Find the value of $16^{-\frac{1}{4}}$ (2)

(b) Simplify $x(2x^{-\frac{1}{4}})^4$ (2)

(Total 4 marks)

Question 6

Find the value of

(a) $25^{\frac{1}{2}}$ (1)

(b) $25^{-\frac{3}{2}}$ (2)

(Total 3 marks)

Question 7

(a) Write down the value of $32^{\frac{1}{5}}$ (1)

(b) Simplify fully $(32x^5)^{-\frac{2}{5}}$ (3)

(Total 4 marks)