

Indices

Difficulty: Easy

Question Paper 1

Level	IGCSE
Subject	Maths (0580/0980)
Exam Board	CIE
Topic	Algebra and graphs
Sub-Topic	Indices
Paper	Paper 2
Difficulty	Easy
Booklet	Question Paper 1

Time allowed: 45 minutes

Score: /35

Percentage: /100

Grade Boundaries:

CIE IGCSE Maths (0580)

A*	A	B	C	D	E
>88%	76%	63%	51%	40%	30%

CIE IGCSE Maths (0980)

9	8	7	6	5	4	3
>94%	85%	77%	67%	57%	47%	35%

Question 1

Work out.

$$2^{-4} \times 2^5 \quad [1]$$

Question 2

Simplify.

(a) $(m^5)^2$ [1]

(b) $4x^3y \times 5x^2y$ [2]

Question 3

Simplify.
 $(x^2)^5$

[1]

Question 4

Simplify.

(a) $6w^0$

[1]

(b) $5x^3 - 3x^3$

[1]

(c) $3y^6 \times 5y^{-2}$

[2]

Question 5

(a) Write 5^{-3} as a fraction. [1]

(b) Write 0.004 56 in standard form. [1]

Question 6

Simplify. $36y^5 \div 4y^2$ [2]

Question 7

Simplify $(16p^{16})^{\frac{1}{4}}$. [2]

Question 8

Simplify.

(a) $x^3y^4 \times x^5y^3$ [2]

(b) $(3p^2m^5)^3$ [2]

Question 9

Simplify.

$$\left(\frac{x^{64}}{16y^{16}}\right)^{\frac{1}{4}}$$

[3]

Question 10

Simplify.

$$6uw^{-3} \times 4uw^6$$

[2]

Question 11

$$81^x = 3$$

Find the value of x .

[1]

Question 12

Simplify.

(a) $12x^{12} \div 3x^3$

[2]

(b) $(256y^{256})^{\frac{1}{8}}$

[2]

Question 13

(a) Simplify

(i) x^0 , [1]

(ii) $m^4 \times m^3$, [1]

(iii) $(8p^6)^{\frac{1}{3}}$. [2]

(b) $243^x = 3^2$

Find the value of x . [2]