

# Factorising & Expanding

## Difficulty: Easy

### Question Paper 1

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

**Time allowed:** 35 minutes

**Score:** /27

**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

Factorise completely.

$$12x^2 + 15xy - 9x$$

[2]

## Question 2

Expand the brackets and simplify.

$$(5 - n)(3 + n)$$

[2]

## Question 3

Factorise completely.

$$12n^2 - 4mn$$

[2]

### Question 4

Factorise.

$$14x - 21y$$

[1]

### Question 5

Factorise completely.

$$4x^2 - 8xy$$

[2]

## Question 6

(a) Simplify.

$$\frac{4(x-6)^2}{(x-6)}$$

[1]

(b) Expand the brackets and simplify.

$$(x+4)^2 + 5(3x+2)$$

[3]

## Question 7

Expand the brackets and simplify.

$$4(5w+3) - 2(w-1)$$

[2]

## Question 8

Factorise.

(a)  $m^3 + m$  [1]

(b)  $25 - y^2$  [1]

(c)  $x^2 + 3x - 28$  [2]

## Question 9

$y = x^2 + 7x - 5$  can be written in the form  $y = (x + a)^2 + b$ .

Find the value of  $a$  and the value of  $b$ . [3]

## Question 10

Factorise  $2x - 4xy$ .

[2]

## Question 11

Factorise

(a)  $9w^2 - 100$ ,

[1]

(b)  $mp + np - 6mq - 6nq$ .

[2]