1.5 Polynomials

Question Paper

Course	Edexcel IAL Maths: Pure 1
Section	1. Algebra & Functions
Topic	1.5 Polynomials
Difficulty	Easy

Time allowed: 40

Score: /30

Percentage: /100

Question 1

Expand

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

(ii) $5y^2(y - 6)$

(iii) $xy(2x + 7y)$

[5 marks]

Question 2

Expand and simplify

(i) $(2x + 3)(x - 4)$

(ii) $2p(p + 3)(p - 2)$

(iii) $(y - 1)(y - 2)^2$

[5 marks]

Question 3

(i) A triangle has base $(6x + 8)$ and height $2x$ units. Find an expression for the area of the triangle.

(ii) A cube has side length of $(3x - 5)$ units. Find an expression for the volume of the cube.

[4 marks]

Question 4

Factorise

(i) $5x - 20$

(ii) $2y^2 - 4y$

(iii) $8xy^2 + 6xy$

[5 marks]

Question 5

Factorise

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

(ii) $x^2 - 7x + 12$

(iii) $x^2 + 5x - 14$

(iv) $x^2 - 81$

[7 marks]

Question 6

Factorise

(i) $4x^2 - 4x - 15$

(ii) $3x^3 + 11x^2 - 4x$

[4 marks]