

Algebra 2: Factorising Quadratic Equations

Prerequisite Knowledge:

- Junior Cycle Algebra course

Tips for students:

There are 4 main types of Junior Cycle Factorising:

- Factorising the Difference of two squares
- Factorising the common term
- Factorising by grouping
- Factorising quadratic expressions

Questions for class

Example 1

Factorise:

$$4x^2 - 18x + 8$$

Example 2

Factorise:

$$3x^2 + x - 14$$

Question 1

Factorise each of the following expressions:

(i) $2x^2 + 7x + 6$

(ii) $3x^2 - 10x + 3$

(iii) $3x^2 + 19x + 20$

(iv) $5x^2 + 13x - 6$

(v) $9x^2 + 12x + 4$

(vi) $5x^2 - 13x - 6$

(vii) $3q^2 + 14q + 15$

(viii) $3t^2 + 17t - 6$

(ix) $2x^2 - 9x - 5$

Questions from GK Tuition tutorial

Example 1

Factorise:

$$x^2 + 12x + 35$$

Example 2

Factorise:

$$2x^2 - x - 6$$

Question 1

Factorise each of the following expressions:

(i) $x^2 - 8x + 15$

(ii) $x^2 + 3x - 28$

(iii) $x^2 + 7x + 10$

(iv) $x^2 - 5x + 6$

(v) $2x^2 - 3x - 2$

(vi) $3x^2 - 7x + 2$

(vii) $3x^2 + 19x - 14$

(viii) $3x^2 - 13x - 10$

(ix) $5x^2 - 13x - 6$

(x) $5x^2 - 13x + 6$