

Being able to factorise a quadratic expression is a skill that can help when solving quadratic equations and, in turn, sketching quadratic functions.

Factorising
Quadratic
Expressions
study guide



Model Answers
to this Sheet



1. Factorise the following quadratic expressions;

(a) $x^2 + 2x + 1$

(b) $x^2 + 8x + 7$

(c) $x^2 + 8x + 12$

(d) $x^2 + 7x + 12$

(e) $x^2 + 13x + 12$

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

(g) $x^2 - 8x + 12$

(h) $x^2 - 13x + 12$

2. Factorise the following quadratic expressions;

(a) $x^2 - x - 12$

(b) $x^2 + x - 12$

(c) $x^2 - 3x - 10$

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

3. Factorise the following quadratic expressions;

(a) $6x^2 - 3x$

(b) $x^2 - 100$

(c) $x^2 - 1$

(d) $4x^2 - 36$

(e) $7x^2 - 2$

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

4. What whole number values of a mean that you can factorise the quadratic expression $x^2 + ax + 16$?



This worksheet is one of a series on mathematics produced by the Learning Enhancement Team.

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