# Solving Quadratics by Factorising

### Vocabulary:

Coefficient

Quadratic

Expression

Factorise

Prime

### Prior Knowledge:

To find different factorisations of a number

### Activities:

Find different factorisations of:

12

20

38

100

Explain why some of your factorisations are not “complete” and why.

### Prior Knowledge:

To factorise expressions which require one or two sets of brackets.

### Activities:

Factorise the following:

### Prior Knowledge:

To know when something is fully factorised, and link this to prime factorisation.

### Activities:

Factorise the following in 3 different ways:

Explain why two of them are not fully factorised.

Fully factorise the following

### Group questioning:

Give me two numbers which multiply together to get zero

### Aims:

To realise that if two numbers multiply together to give zero, one of them must be zero

To use this to solve equations where two expressions are multiplied together

### Activities:

Example.

Solve

Solve

Section A

### Aims:

To know that you can’t solve most quadratic equations by rearranging

### Activities:

Solve

To realise that factorising is the process that helps you to write an expression as two expressions multiplied together

To know the definition of the word quadratic

To use this idea to solve quadratic equations

### Activities:

Section B and C

Examples if necessary.

### Aims:

To solve equations which involve factorising into two brackets.

### Activities:

Examples

Section D

