# Quadratic Formula

### Prior Knowledge:

To solve quadratic equations by factorising.

### Activities:

### Aims:

To solve equations by completing the square

### Activities:

### Aims:

To generalise the rearrangement process to create a formula

### Activities:

Whole class, or guided discovery worksheet.

 (use fractions, not decimals)

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Expand…   









### Aims:

To apply this formula to solve quadratic equations

To decide when it is best to complete the square and when it is best to use the formula

### Activities:

Examples

(no solutions)

Section B onwards

### Aims (extension):

To use the formula to decide how many real solutions an equation has.

To compare completing the square with the quadratic formula.

### Activities:

Section D

Sketching quadratics:

<https://teacher.desmos.com/activitybuilder/custom/59ea79524ee5460b371ec0f6>