

Quadratic solving sorter

Teacher notes

Why use this resource?

Students learn several different methods for solving quadratics, and are often unclear as to which is the most appropriate method for solving any given example. This resource offers the opportunity to address this directly.

Possible approaches

The equation cards could be given out for students to sort into groups. They may choose to group them according to superficial features; if so, you may wish to encourage them to think of an alternative grouping or to offer them the possible group cards.

After they have sorted their cards and discussed their reasons, you could give them a printout of the “One possible grouping” section (which does not include the descriptions of the groups) and invite the students to think about the questions posed there, beginning with “What rules might we have used for our groups?”.

Key questions

- How will you choose to define the groups?
- Are there some equations which belong to more than one group?

Possible support

- How might you go about solving each question?
- Think of a method of solving quadratics that you know. Now find some cards that can be solved using this method. Do you know any other methods?

Possible extension

Can you form an equation that does not fit into any of your groupings?