GeoGebra constructions... quadratic edition

Teacher notes

Why use this resource?

This activity encourages students to generalise and make links between different forms of a quadratic and its graph using GeoGebra. It includes problems ranging from two familiar starting points to a very hard challenge. It also includes a brief introduction to using GeoGebra in an algebraic manner.

Preparation

students will need to have access to GeoGebra app or GeoGebra on a computer.

Possible support

Use GeoGebra to plot some familiar quadratics in different forms and compare these graphs to the graphs in the questions.

Note

The resource talks about "drawing quadratics". Quadratics of the form $y = ax^2 + bx + c$ or equivalent are intended. This has not been explicitly stated, because we are trying to keep the wording of the problem simple and natural for students to understand. (At this stage, they are unlikely to think about curves such as $x^2 + y^2 = 16$ as being quadratics.)