

Why use this resource?

Students often assume that all quadratic graphs are symmetrical because they all look like they have a line of symmetry. This resource gives students an opportunity to convince themselves that this is, indeed, the case.

This resource focuses on a specific quadratic but the ideas can be generalised.

Key question

Are all quadratic graphs symmetrical? How can you convince someone of this?

Possible support

How would you define symmetrical in this context?

If the graph has a line of symmetry, what is it? How can we use this idea?

Does the graph look similar to any other graph you know? How can we use this idea?

Possible extension

Can you generalise this result to show that every quadratic graph has a line of symmetry?