

Two-way functions

Teacher notes

For detailed notes on this resource, please see [Two-way functions - teacher support](#).

Why use this resource?

This resource gives students an opportunity to explore their understanding of roots and asymptotes of functions, both by identifying properties that functions have in common and also by seeking functions that have particular properties.

In the process, students will sketch lots of functions, and develop their sense of how equations relate to the sketches. Some of the cells of the table may be quite hard to fill in, so students may like to use the list of functions in the [Suggestion](#), which includes enough functions to complete the table plus some extras. It could make a nice group activity, perhaps with different pairs comparing their tables to see where they have used the same functions and where they disagree.

A version of this resource has been featured on the [NRICH website](#). You might like to look at some students' solutions that have been submitted there.