

Why use this resource?

This resource invites students to try linear interpolation (finding a point on a straight line between two other points). This problem is also useful in helping students to see that there can be more than one way of solving a problem and evaluating which is the best method. Students also have the opportunity to develop skills that will be needed later.

Possible approach

Individuals or groups should try to come up with as many ways to solve the problem as they can, before each group feeds back on one of their methods. The class could try to decide which of the methods they think is the most efficient. Is it the same method for each problem?

Key questions

- Which method would you choose to use to solve this problem? Explain your reasoning.

Possible extension

Can you generalise each method? Can you show that each result is equivalent to each other?

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