# Look before you leap

Teacher notes

## Why use this resource?

This lovely problem is great for students looking to develop problem-solving skills, as well as practising using similar triangles. An elegant solution uses similar triangles, although one could also tackle it using trigonometry or coordinate geometry.

As students progress, they will learn new techniques that will give other approaches to this problem, so this is a good one to bookmark and revisit from time to time to see what else they can do.

## Possible support

There are lots of triangles in the diagram. Can students find any similar triangles that might help them? Or students could be given the first section of one of the approaches in the **Solution** section.

## Possible extension

Can students come up with other ways of solving the problem? Which methods do they prefer?