

### Why use this resource?

Once students have spent some time on the benefits of using calculus to determine the nature of stationary points, identifying increasing and decreasing parts of a curve, and how we can use this to sketch a curve given its equation, this resource can be used to link all these features together and provide a framework for discussion.

An alternative approach is to use this resource to motivate integration.

It is essential that the students think about how the curves should *look* before delving into the algebra.

Ideas for using this resource can be found on the [Resources in action](#) page.