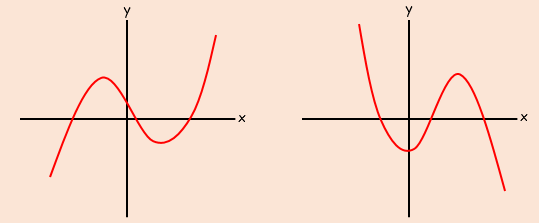
**4A Sketching Cubic Graphs**



1. Sketch the graph of the function:

x

y

1. Sketch the graph of the function:

x

y

1. Sketch the graph of the function:

x

y

1. Sketch the graph of the function:

x

y

**4B Sketching Quartic Graphs**

1. Sketch the curve:

x

y

1. Sketch the curve:

x

y

1. Sketch the curve:

x

y

**4C Sketching Reciprocal Graphs**

1. Sketch the graph:

x

y

1. Sketch the graph:

x

y

1. Sketch the graph:

x

y

**4D Intersecting Graphs**

1. On the same diagram, sketch the following curves:

and

x

y

1. Find the co-ordinates of the points of intersection
2. On the same diagram, sketch the following curves:

and

x

y

1. Explain how the graph shows that the following equation has 2 solutions

**4E Translating Graphs**

1. Sketch the following graphs:

x

y

1. Given that and ,

sketch the graphs of and

x

y

x

y

1. Given that , sketch the curve with equation , stating the equations of any asymptotes and intersections with the axes

x

y

**4F Stretching Graphs**

1. Given that , sketch the curves with equations:

x

y

x

y

x

y

1. Sketch the curve with equation

x

y

1. Hence, sketch the curve

x

y

1. Based on your sketch in a), also sketch the curve

x

y

1. On the same set of axes, draw the graphs of , and

where

x

y

**4G Unfamiliar Functions**

1. The diagram to the right shows a sketch of the curve which passes through the origin. The points and also lie on the curve.

y

x

(1,4)

(3,1)

1. Sketch the graph of

y

x

1. Sketch the graph of

y

x

1. Sketch the graph of

y

x

1. Sketch the graph of

y

x