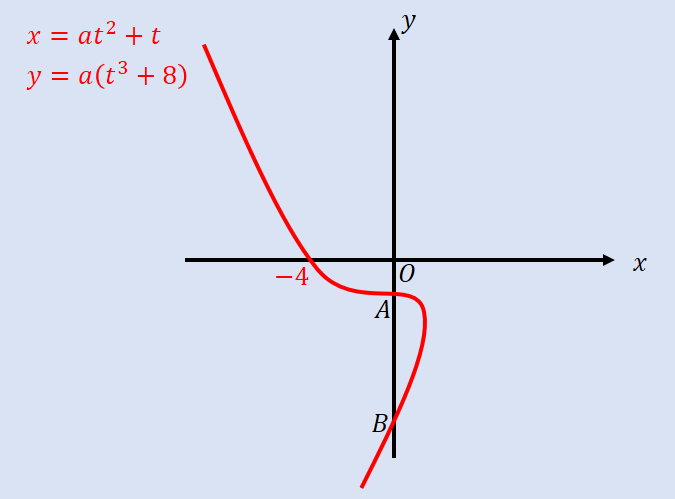
**8D Intersections**

1. The diagram shows a curve C with parametric equations:

, ,

Where a is a non-zero constant. Given that passes through the point (-4,0):

1. Find the value of



1. Find the coordinates of the points and where the curve crosses the y-axis
2. A curve is given parametrically by the equations:

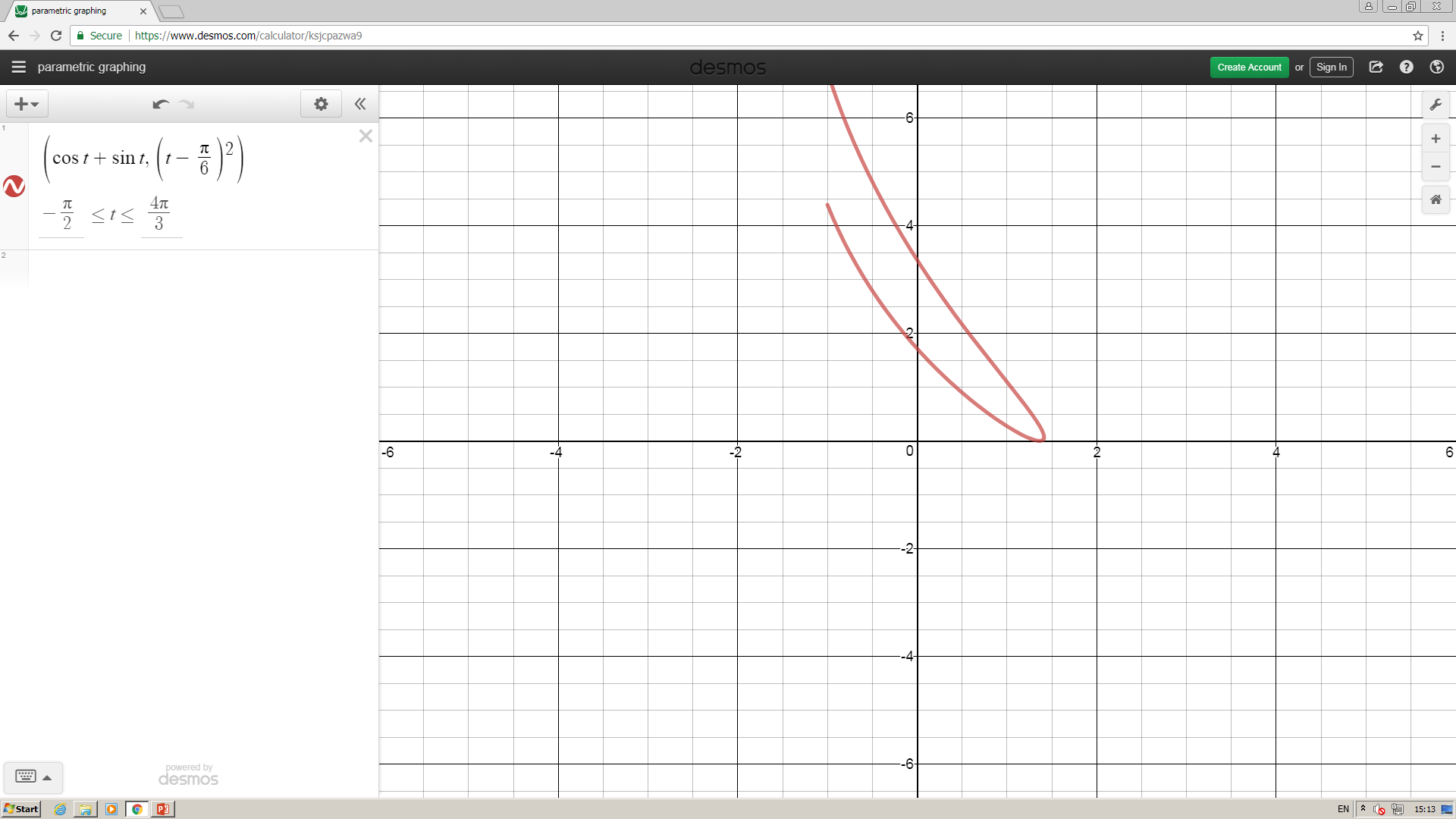
,

The line meets the curve at A. Find the coordinates of A.

1. The curve in the diagram is given parametrically by the equations:

,

1. Find the point where the curve intersects the line



1. Find the coordinates of the points A and B where the curve meets the y-axis