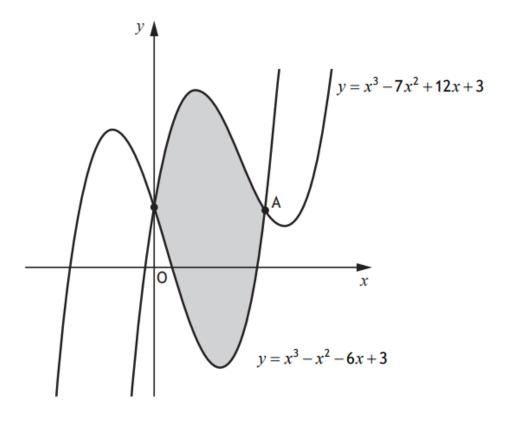
Higher Maths SQA 2021 Paper 1 Question 9



The diagram shows the curves with equations $y = x^3 - 7x^2 + 12x + 3$ and $y = x^3 - x^2 - 6x + 3$.

The curves intersect on the y-axis and at point A.



(a) Find the x-coordinate of A.

2

(b) Calculate the shaded area.

5

Answers:

(a)
$$x = 3$$

(b) 27 (units²)