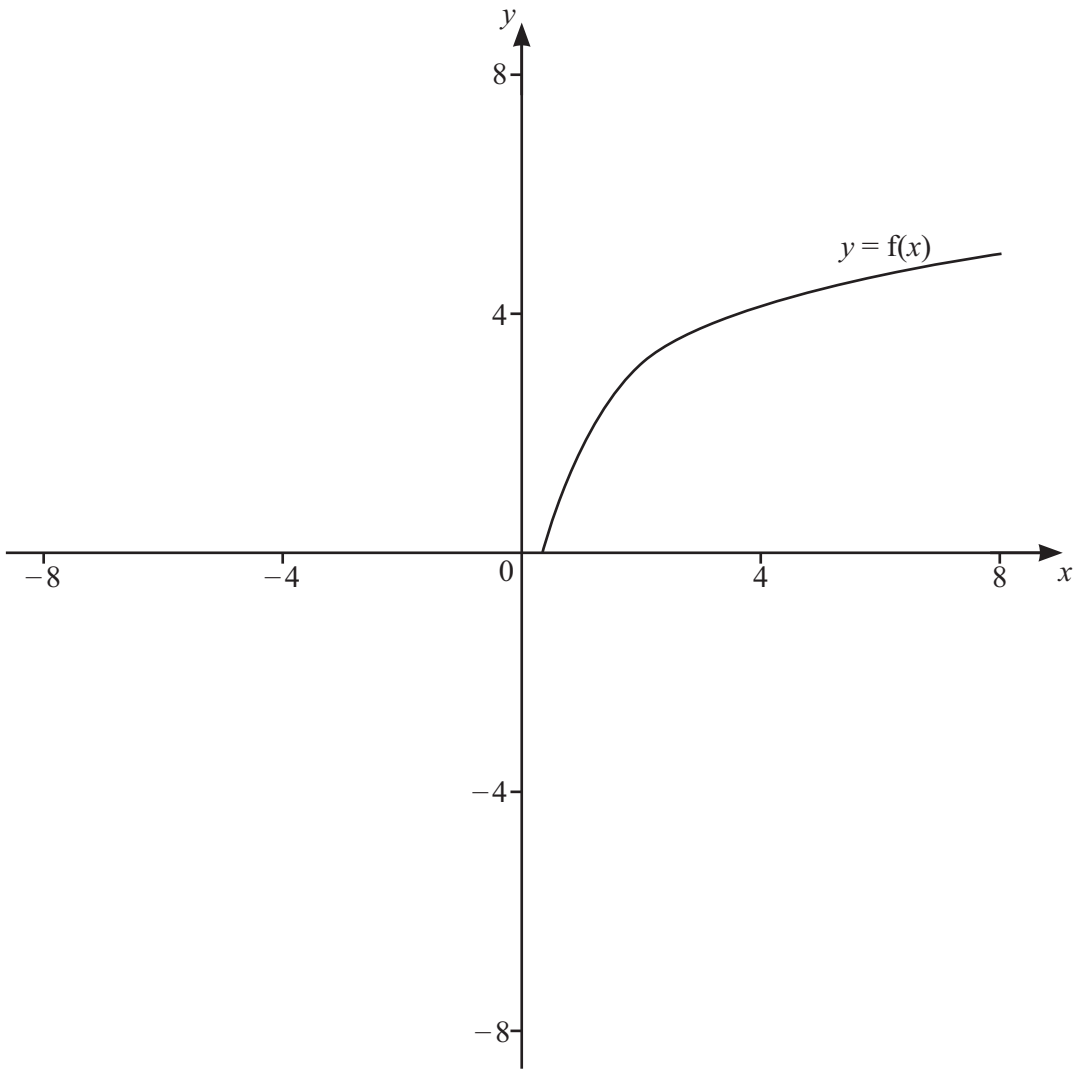
1 It is given that $p(x) = ax^3 - 7x^2 - bx + 9$, where a and b are constants.
$x - 3$ is a factor of $p(x)$.
When $p(x)$ is divided by $x + 2$ the remainder is -35.

Find the values of a and b. [5]

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2 (a) (i)



The diagram shows the graph of $y = f(x)$.

On the same diagram sketch the graph of $y = f^{-1}(x)$. [1]

(ii) Describe the relationship between the graph of $f(x)$ and the graph of $f^{-1}(x)$. [1]

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