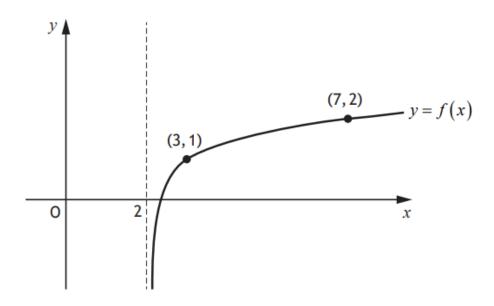
Higher Maths SQA 2021 Paper 1 Question 17



A logarithmic function, f, is defined for x > 2.

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



The inverse function, $f^{-1}(x)$, exists.

(a) On the diagram in your answer booklet, sketch the graph of the inverse function.

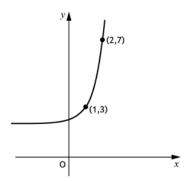
2

(b) Given that $f(x) = \log_5(x-2) + 1$, find the coordinates of the point where the graph of $f^{-1}(x)$ crosses the *y*-axis.

2

Answers:

(a)



(b)
$$\left(0,\frac{11}{5}\right)$$