National 5 Maths SQA 2024 Paper 1 Question 12



(a) Express
$$x^2 - 6x + 8$$
 in the form $(x - a)^2 + b$.

2

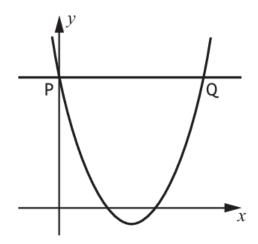
(b) Hence, or otherwise, state the coordinates of the turning point of the graph of $v = x^2 - 6x + 8$.

1

The diagram shows the graph of $y = x^2 - 6x + 8$.

A line PQ has been drawn parallel to the x-axis, where:

- P lies on the y-axis
- P and Q lie on the graph of $y = x^2 6x + 8$.



(c) Find the coordinates of Q.

2

Answers:

(a)
$$(x-3)^2-1$$

- (b) (3, -1)
- (c) (6, 8)