

9 A curve C has equation $y = f(x)$ where

$$f(x) = (x - 2)(x - 3)^2$$

9 (a) Find the exact coordinates of the turning points of C .

Determine the nature of each turning point.

Fully justify your answer.

[8 marks]

9 (b) State the coordinates of the turning points of the curve

$$y = f(x + 1) - 4$$

[2 marks]