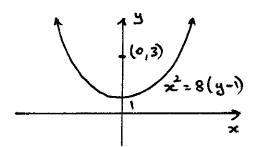
05 If Find the coordinates of the focus of the parabola $x^2 = 8(y - 1)$.

$$x^2 = 8(y - 1)$$

 $x^2 = 8(y-1)$ which is of the form of $(x-h)^2 = 4a(y-k)$

Vertex (0, 1) with a = 2.

 \therefore the coordinates of the focus is (0, 3).



^{*} These solutions have been provided by projectmaths and are not supplied or endorsed by the Board of Studies

Board of Studies: Notes from the Marking Centre

This part was not done well. In better responses candidates demonstrated an understanding of the terms 'vertex', 'focal length' and 'focus'. Common errors included stating that focus = (0, a) = (0, 2), focus = 2, focus = (0, 1), or vertex = (0, -1).

Source: http://www.boardofstudies.nsw.edu.au/hsc_exams/