MTH 111, Math. for the Architects, Quiz one 2014

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QUESTION 1. For the ellipse $\dfrac{(x-4)^2}{16} + \dfrac{(y+3)^2}{9} = 1$ find

(i) The constant k

(ii) The vertices

(iii) The foci

QUESTION 2. For the parabola $4x = y^2 + 6y - 3$. Find the vertex, the focus and the directrix

QUESTION 3. Find an equation of the ellipse where one of the foci is $(4, 5)$, $(1, c)$ (for some number c) and $(1, 8)$ are vertices.. Draw a rough sketch of the curve.

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