

2 The graph with equation

$$y = (x - 3)^2 + 7$$

is translated through one of the following vectors.

The translated graph has the x -axis as a tangent.

Determine the vector which describes the translation.

Circle your answer.

[1 mark]

$$\begin{bmatrix} 0 \\ -7 \end{bmatrix}$$

$$\begin{bmatrix} 0 \\ -3 \end{bmatrix}$$

$$\begin{bmatrix} 0 \\ 3 \end{bmatrix}$$

$$\begin{bmatrix} 0 \\ 7 \end{bmatrix}$$