21 The points A and B are such that the coordinates of A are $(3, -2)$ and $\overrightarrow{BA} = \begin{pmatrix} -1 \\ 4 \end{pmatrix}$

(a) Find the coordinates of point B

(........................ , ...)

(2)

The point C has coordinates (m, n) where $m > 3$

Given that $\left| \overrightarrow{AC} \right| = 5$

(b) find an expression for m in terms of n

$m = $ ....

(3)

(Total for Question 21 is 5 marks)