

**Higher – Daily HW 1**

1.  $2x^2 - 8x + 7$  is expressed in the form  $2(x + p)^2 + q$ , what is the value of  $q$ ?

2.  $\vec{AB} = \begin{pmatrix} 1 \\ -2 \\ 1 \end{pmatrix}$  and  $\vec{AC} = \begin{pmatrix} 2 \\ 0 \\ -1 \end{pmatrix}$

- a) Find the value of  $\vec{AB} \cdot \vec{AC}$ .
- b) Use the result of (a) to find the size of angle BAC.