2nd August	

$-9 < a < -3$ and $-5 < b < -4$ Write down an inequality for each of the following	ab $12 < ab < 45$
a^2 $9 < a^2 < 81$	$\dfrac{a}{b}$ $\dfrac{3}{5} < \dfrac{a}{b} < \dfrac{9}{4}$
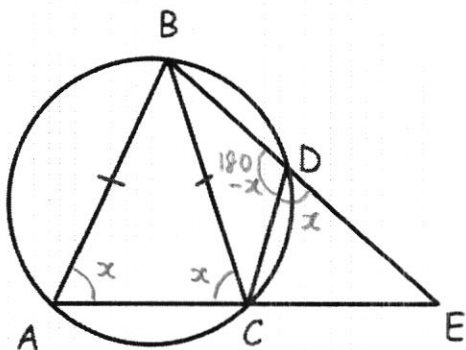
AB = BC
ACE and BDE are straight lines.

Prove that angle BCA = CDE

$B\hat{C}A = x$

$\Rightarrow B\hat{A}C = x$ $(AB = BC)$

$\Rightarrow B\hat{D}C = 180 - x$ (cyclic qd. ABDC)

$\Rightarrow C\hat{D}E = x$ $(BDE$ st. line$)$

$\Rightarrow B\hat{C}A = C\hat{D}E$

$A = \begin{pmatrix} -2 & 3 \\ 1 & -4 \end{pmatrix}$ $B = \begin{pmatrix} 8 & 0 \\ 2 & -1 \end{pmatrix}$

Work out the matrix **AB**

$\begin{pmatrix} -2 & 3 \\ 1 & -4 \end{pmatrix}\begin{pmatrix} 8 & 0 \\ 2 & -1 \end{pmatrix}$

$= \begin{pmatrix} -10 & -3 \\ 0 & 4 \end{pmatrix}$