2nd January

Corbettmaths

Chris makes 5-digit numbers using all of the cards below.

1	2	3	5	8

How many different numbers less than 50000 can he make?

A $= \begin{pmatrix} -1 & 3 \\ 2 & 1 \end{pmatrix}$ **B** $= \begin{pmatrix} 2 & -1 \\ -1 & 7 \end{pmatrix}$

Work out the matrix **BA**

$(x - 5)$ is a factor of
$x^3 - 6x^2 + 3x + a$

Work out the value of a

A curve has equation
$y = x^2 + 6x - 3$

Work out the equation of the tangent to the curve $y = x^2 + 6x - 3$
at the point $(1, 4)$