Eg. 6 Expand the expressions below.

- (i) $(2x+3)^4$ (ii) $(3a-2b)^5$

iii DEG	IDME 🗮		
POLYFOR 16*X^4+	M((2*X 96*X^3	(+3)^4, }+216*>	X) (^2
STON			

<u>Use POLYFORM((2X+3)^4, X)</u> to expand the polynomial. Use the (i) **EHDL** key to examine the result.

Result:
$$16x^4 + 96x^3 + 216x^2 + 216x + 81$$

....

Use POLYFORM((3A-2B)^5, B) to (ii) expand the polynomial as a function of B. Then use the polynomial function again, **COPY** ing the result from the first expansion and expanding this time as a function of A. The **SHOW** key can then be used to view it, using the left and right arrows to scroll the screen left and right.

POLYFORM((3*A-2*B)^5, -(32*B^5)+240*A*B^4+1 POLYFORM(-(32*B^5)+24 243*A^5-810*B*A^4+108
STOP
243·A ⁵ -810·B·A ⁴ +1080·B ² ·f
STOP COPY SHOW