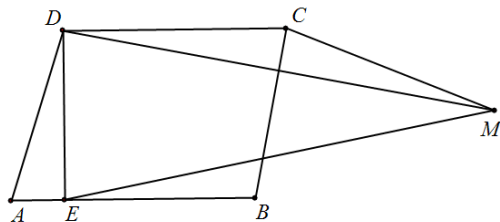**Example 203 :** As shown in Figure 1 , in the parallelogram $ABCD$, $DE \perp AB$ at point E , $MD = ME$, $MC = CD$. Prove: $\angle EMC = 3 \angle BEM$.

Proof:
$$\frac{\dfrac{M-E}{M-C}}{\left(\dfrac{E-M}{A-B}\right)^3} = \left(\frac{A-B}{D-E}\right)^4 \frac{\dfrac{M-D}{M-C}}{\dfrac{A-B}{D-M}} \left(\frac{\dfrac{E-D}{E-M}}{\dfrac{D-M}{D-E}}\right)^2 ,$$

AB // DC is used in the identity , and there is no need for the quadrilateral $ABCD$ to be a parallelogram.