15 *OXYZ* is a parallelogram.
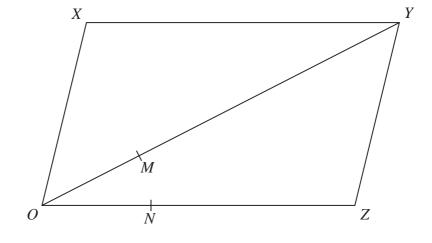

$\overrightarrow{OY} = \mathbf{a}$ and $\overrightarrow{OZ} = \mathbf{b}$

M is the point on *OY* such that $OM:MY = 1:3$
N is the point on *OZ* such that $ON:NZ = 1:2$

Work out the ratio   *XN* : *MN*
You must show all your working.

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