24 *OXYZ* is a trapezium.

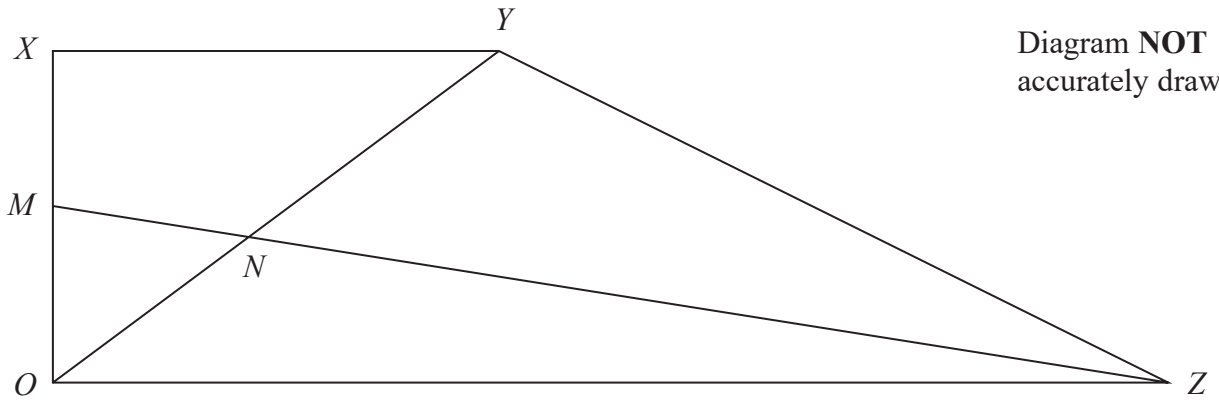


Diagram **NOT** accurately drawn

$\overrightarrow{OX} = \mathbf{a}$

$\overrightarrow{XY} = \mathbf{b}$

$\overrightarrow{OZ} = 3\mathbf{b}$

M is the midpoint of *OX*
N is the point such that *MNZ* and *ONY* are straight lines.

Given that $ON : OY = \lambda : 1$

use a vector method to find the value of λ

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$\lambda =$ .....

(Total for Question 24 is 5 marks)

TOTAL FOR PAPER IS 100 MARKS

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