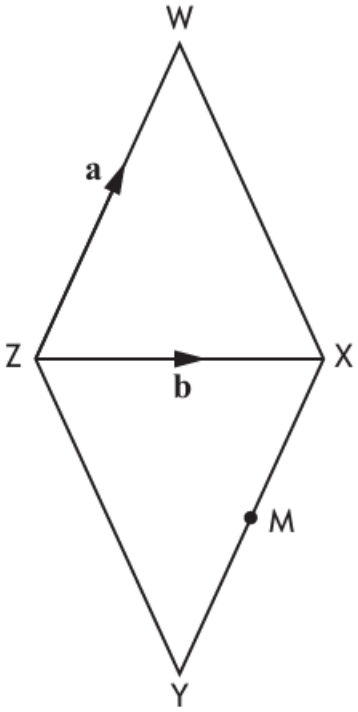
National 5 Maths
SQA 2024 Paper 2
Question 14

National 5 Maths
Maths.scot

The diagram shows a rhombus WXYZ with a diagonal ZX drawn.



$\overrightarrow{ZW}$ represents vector $\mathbf{a}$ and $\overrightarrow{ZX}$ represents vector $\mathbf{b}$.

(a) Express $\overrightarrow{WX}$ in terms of $\mathbf{a}$ and $\mathbf{b}$. 1

M is the mid-point of XY.

(b) Express $\overrightarrow{WM}$ in terms of $\mathbf{a}$ and $\mathbf{b}$.
Give your answer in its simplest form. 2

Answers:

(a) $\mathbf{b}-\mathbf{a}$ or $-\mathbf{a}+\mathbf{b}$

(b) $\mathbf{b}-\frac{3}{2}\mathbf{a}$