N5 Maths: Vectors

Answers

Q1 **a)** $\begin{pmatrix}2\\3\end{pmatrix}$ **b)** $\begin{pmatrix}-2\\2\end{pmatrix}$ **c)** $\begin{pmatrix}-5\\4\end{pmatrix}$

d) $\begin{pmatrix}9\\2\end{pmatrix}$ **e)** $\begin{pmatrix}15\\-4\end{pmatrix}$ **f)** $\begin{pmatrix}7\\1\end{pmatrix}$

g) $\begin{pmatrix}7\\-10\end{pmatrix}$ **h)** $\begin{pmatrix}-6\\0\end{pmatrix}$ **i)** $\begin{pmatrix}5\\-16\end{pmatrix}$

Q2 **a)** $\begin{pmatrix}5\\6\\2\end{pmatrix}$ **b)** $\begin{pmatrix}4\\4\\-4\end{pmatrix}$ **c)** $\begin{pmatrix}-5\\3\\-4\end{pmatrix}$

d) $\begin{pmatrix}-5\\12\\-4\end{pmatrix}$ **e)** $\begin{pmatrix}6\\-2\\20\end{pmatrix}$ **f)** $\begin{pmatrix}-4\\18\\-4\end{pmatrix}$

Q3 **a)** $\boldsymbol{d} = \boldsymbol{a} + 2\boldsymbol{b}$

b) $\boldsymbol{d} = \boldsymbol{b} + \frac{1}{2}\boldsymbol{c}$

Q4 **a)** $\overrightarrow{\mathrm{PQ}} = \begin{pmatrix}11\\-2\\-5\end{pmatrix}$

b) $\overrightarrow{\mathrm{MQ}} = \begin{pmatrix}8\\0\\-4\end{pmatrix}$

Q5 **a)** 5 **b)** 13 **c)** $\sqrt{5}$

d) 3 **e)** $\sqrt{18} = 3\sqrt{2}$ **f)** 6

Q6 5

This resource is copyright © Maths.scot, released under a Creative Commons "Attribution, Non-Commercial, No Derivatives" (CC BY-NC-ND 4.0) licence.