



$$\vec{u} = \begin{pmatrix} -3 \\ 2 \end{pmatrix}$$

$$\vec{u} = \begin{pmatrix} 5 \\ 2 \end{pmatrix}$$

$$\vec{w} = \begin{pmatrix} -2 \\ 2 \end{pmatrix}$$

$$\vec{v} = \begin{pmatrix} 4 \\ -4 \end{pmatrix}$$

$$3\vec{u} = \begin{pmatrix} 15 \\ 6 \end{pmatrix}$$

$$\vec{v} - \vec{w} = \begin{pmatrix} 6 \\ -6 \end{pmatrix}$$

$$3\vec{u} + \vec{w} = \begin{pmatrix} 13 \\ 8 \end{pmatrix}$$

$$\vec{u} = \begin{pmatrix} 5 \\ 2 \end{pmatrix}$$

$$\vec{v} = \begin{pmatrix} 4 \\ -4 \end{pmatrix}$$

$$\vec{w} = \begin{pmatrix} -2 \\ 2 \end{pmatrix}$$

$$4\vec{u} - \vec{v} + 6\vec{w}$$

$$= \begin{pmatrix} 20 \\ 8 \end{pmatrix} + \begin{pmatrix} -4 \\ +4 \end{pmatrix} + \begin{pmatrix} -12 \\ 12 \end{pmatrix}$$

$$= \begin{pmatrix} 4 \\ 24 \end{pmatrix}$$

$$7\vec{u} - 3\vec{w}$$

$$= \begin{pmatrix} 35 \\ 14 \end{pmatrix} + \begin{pmatrix} 6 \\ -6 \end{pmatrix}$$

$$= \begin{pmatrix} 41 \\ 8 \end{pmatrix}$$

$$\vec{u} - \vec{v} = \vec{u} + (-\vec{v})$$

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