

Name: _____ Sort #: _____

Worksheet 1

Vectors & 3D Coordinate Space

MATH 2210, Fall 2018

Given that $\mathbf{u} = \langle 2, -1 \rangle$ and $\mathbf{w} = \langle 1, 2 \rangle$, find the following.

1. $\mathbf{v} = \frac{3}{2}\mathbf{u}$

2. $\mathbf{v} = \mathbf{u} + \mathbf{w}$

3. $\mathbf{v} = \mathbf{u} + 2\mathbf{w}$

$$4. \mathbf{v} = 5\mathbf{u} - 3\mathbf{w}$$

$$5. \|\mathbf{u}\|$$

$$6. \|\mathbf{u} + \mathbf{w}\|.$$