Exercise 1 *Consider*

- *The vector* $\vec{\mathbf{v}}$ *whose tip is at the point* $(-3, 4, 2)$ *and whose tail is at the point* $(-1, 2, -1)$.
- *The vector* $\vec{\mathbf{w}}$ *whose tip is at the point* $(1, -3, 0)$ *and whose tail is at the point* $(3, 3, 1)$.

Compute $\vec{\mathbf{v}} + \vec{\mathbf{w}}$.

$$\vec{\mathbf{v}} + \vec{\mathbf{w}} = \left\langle \boxed{-4}, \boxed{-4}, \boxed{2} \right\rangle$$

Hint: *We find:*

$\vec{\mathbf{v}} = \left\langle \boxed{-2}, \boxed{2}, \boxed{3} \right\rangle$

$\vec{\mathbf{w}} = \left\langle \boxed{-2}, \boxed{-6}, \boxed{-1} \right\rangle$