

Written HW21 – MATH 1540 Spring 2022

Due by 29 April for timely completion credit

Recall how we converted between “component form” of vectors and “magnitude and direction description” of vectors in the 25 April class.

1. Find the components of the vector \vec{v} where $\|\vec{v}\| = 3$ and its direction is $\theta = \frac{\pi}{6}$.
2. Find the components of the vector \vec{v} where $\|\vec{v}\| = 1$ and its direction is $\theta = \frac{4\pi}{3}$.
3. Given $\vec{v} = \langle 4, 7 \rangle$, find its magnitude and direction.
4. Given $\vec{v} = \langle -4, -9 \rangle$, find its magnitude and direction.