MAT223 – Linear Algebra I – Winter 2023

Written Assignment 4

Due Tuesday 7 March at 9pm on Crowdmark

1 Notes and instructions

- This assignment contains four problems.
- Begin the process of submitting your solutions early. **Late assignments will receive a grade of 0**, and we will not make exceptions to this, especially if you began submitting your assignment minutes before the deadline.
- Organize your solutions neatly and write clearly/legibly. If we can't read your submission, then it won't get any points.
- Explain your solutions to each problem clearly. Your goal with this and any other assignment is to **communicate your answers and your reasoning for why they are correct as clearly as possible to the reader**.

2 Problems

1. Consider the following four vectors in $\mathbb{R}^5$.

$$\vec{v}_1 = \begin{bmatrix} 1 \\ 0 \\ 2 \end{bmatrix} \qquad \vec{v}_2 = \begin{bmatrix} 2 \\ -1 \\ 2 \end{bmatrix} \qquad \vec{v}_3 = \begin{bmatrix} 3 \\ 2 \\ 0 \end{bmatrix} \qquad \vec{v}_4 = \begin{bmatrix} 5 \\ 1 \\ 2 \end{bmatrix}$$